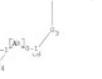



 $\theta_7^5 \xrightarrow{CR} \theta_9^6$ 
 $\theta_{12}^2 \xrightarrow{Cg} \theta_9^1$ 
 $\theta_{12}^1 \xrightarrow{Cg} \theta_9^3$ 
 $\theta_9^1 \xrightarrow{O} \theta_{10}^{11}$ 
 $\theta_9^2 \xrightarrow{O} \theta_{11}^{12}$ 
 $\theta_9^3 \xrightarrow{O} \theta_{13}^{14}$ 
 $\theta_{11}^{12} \xrightarrow{O} \theta_9^{16}$ 
 $\theta_9^{17} \xrightarrow{O} \theta_9^{18}$ 

 $\theta_{12}^5 \xrightarrow{AO} \theta_9^6$ 
 $\theta_{11}^2 \xrightarrow{Cg} \theta_9^1$ 
 $\theta_{10}^1 \xrightarrow{Cg} \theta_9^3$ 
 $\theta_{13}^{20} \xrightarrow{O} \theta_{14}^{21}$ 
 $\theta_{13}^{22} \xrightarrow{O} \theta_{12}^{10}$ 
 $\theta_{13}^{29} \xrightarrow{O} \theta_{12}^{12}$ 
 $\theta_{13}^{30} \xrightarrow{O} \theta_{14}^{13}$ 
 $\theta_{13}^{31} \xrightarrow{O} \theta_9^{16}$ 
 $\theta_{13}^{17} \xrightarrow{O} \theta_9^{18}$ 
 $\theta_{13}^{15} \xrightarrow{O} \theta_9^{19}$ 
 $\theta_{13}^{16} \xrightarrow{O} \theta_9^{20}$ 


chain nodes :  
 7 8 10 11 14 16 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 47 48 49 50  
 59 60 61 62 72 73 75 76

ring nodes :  
 1 2 3 4 5 6 64 65 66

chain bonds :  
 1-20 2-73 3-72 4-7 6-8 10-11 14-16 20-21 21-22 22-47 23-25 23-28 24-26 24-29

27-30 31-32 33-34 47-48 48-50 50-75 50-76 59-60 60-61 62-66

ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 64-65 64-66 65-66

exact/norm bonds :  
 1-2 1-6 1-20 2-3 2-73 3-4 3-72 4-5 4-7 5-6 6-8 10-11 14-16 20-21 21-22 22-47  
 23-25 23-28 24-26 24-29 27-30 47-48 48-50 50-75 50-76 59-60 62-66

exact bonds :  
 31-32 33-34 60-61 64-65 64-66 65-66

isolated ring systems :  
 containing 1 : 64 :

G1:C,O,S

G2:O,N

G3:[\*1-\*2], [\*3-\*4], [\*5-\*6], [\*7-\*8]

G4:O,N,[\*9-\*10], [\*11-\*12], [\*13-\*14], [\*15-\*16], [\*17-\*18]

G5:C, Si

G6:CH2,O,N

G7:H,CH3

G8:Cy,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS 11:CLASS 14:CLASS  
16:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS  
28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 47:CLASS 48:CLASS  
50:CLASS 59:CLASS 60:CLASS 61:CLASS 62:CLASS 64:Atom 65:Atom 66:Atom 72:CLASS 73:CLASS  
75:CLASS 76:CLASS

Generic attributes :

22:  
Saturation : Saturated  
Number of Carbon Atoms : less than 7  
48:  
Saturation : Saturated  
Number of Carbon Atoms : less than 7

Element Count :

Node 22: Limited  
C,C1-4

Node 48: Limited  
C,C1-4

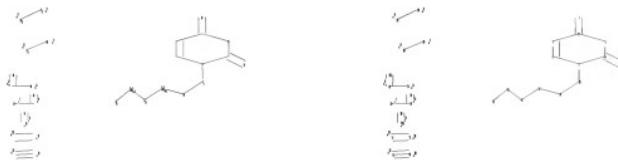
=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2016 OR 2039 OR 2040 OR 2045 OR 2047

L1 SCREEN CREATED

=>  
Uploading C:\Program Files\Stnexp\Queries\10585283.str



chain nodes :

7 8 10 11 14 16 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34  
 47 48 50  
 ring nodes :  
 1 2 3 4 5 6  
 chain bonds :  
 1-20 4-7 6-8 10-11 14-16 20-21 21-22 22-47 23-25 23-28 24-26 24-29  
 27-30 31-32 33-34 47-48 48-50  
 ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6  
 exact/norm bonds :  
 1-2 1-6 1-20 2-3 3-4 4-5 4-7 5-6 6-8 10-11 14-16 20-21 21-22 22-47  
 23-25 23-28 24-26 24-29 27-30 47-48 48-50  
 exact bonds :  
 31-32 33-34  
 isolated ring systems :  
 containing 1 :

G1:C,O,S  
 G2:O,N  
 G3:[\*1-\*2],[\*3-\*4]  
 G4:O,N,[\*5-\*6],[\*7-\*8],[\*9-\*10],[\*11-\*12],[\*13-\*14]  
 G5:C, Si

Match level :  
 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS  
 11:CLASS 14:CLASS 16:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS  
 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS  
 33:CLASS 34:CLASS 47:CLASS 48:CLASS 50:CLASS  
 Generic attributes :  
 22:  
 Saturation : Saturated  
 Number of Carbon Atoms : less than 7  
 48:  
 Saturation : Saturated  
 Number of Carbon Atoms : less than 7

Element Count :  
 Node 22: Limited  
 C,Cl-4

Node 48: Limited  
 C,Cl-4

L2 STRUCTURE UPLOADED

=> que L2 NOT L1

L3 QUE L2 NOT L1

=> d 13

L3 HAS NO ANSWERS

L1 SCR 2016 OR 2039 OR 2040 OR 2045 OR 2047

L2 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.  
L3 QUE L2 NOT L1

=> s 13 sss sam

SAMPLE SEARCH INITIATED 10:29:22 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 26194 TO ITERATE

7.6% PROCESSED 2000 ITERATIONS

8 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 514193 TO 533567

PROJECTED ANSWERS: 1481 TO 2709

L4 8 SEA SSS SAM L2 NOT L1

=> => ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

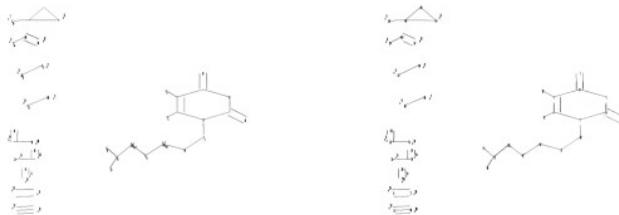
=> screen 2005

L5 SCREEN CREATED

=> screen 2016 OR 2039 OR 2040 OR 2045 OR 2047

L6 SCREEN CREATED

=>  
Uploading C:\Program Files\Stnexp\Queries\10585283 (a).str



chain nodes :  
 7 8 10 11 14 16 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34  
 47 48 50 59 60 61 62 72 73 75 76  
 ring nodes :  
 1 2 3 4 5 6 64 65 66

chain bonds :  
 1-20 2-73 3-72 4-7 6-8 10-11 14-16 20-21 21-22 22-47 23-25 23-28 24-26  
 24-29 27-30 31-32 33-34 47-48 48-50 50-75 50-76 59-60 60-61 62-66  
 ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 64-65 64-66 65-66  
 exact/norm bonds :  
 1-2 1-6 1-20 2-3 2-73 3-4 3-72 4-5 4-7 5-6 6-8 10-11 14-16 20-21  
 21-22 22-47 23-25 23-28 24-26 24-29 27-30 47-48 48-50 50-75 50-76 59-60  
 62-66  
 exact bonds :  
 31-32 33-34 60-61 64-65 64-66 65-66  
 isolated ring systems :  
 containing 1 : 64 :

G1:C,O,S

G2:O,N

G3:[\*1-\*2],[\*3-\*4],[\*5-\*6],[\*7-\*8]

G4:O,N,[\*9-\*10],[\*11-\*12],[\*13-\*14],[\*15-\*16],[\*17-\*18]

G5:C, Si

G6:CH2,O,N

G7:H,CH3

G8:Cy,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS  
 11:CLASS 14:CLASS 16:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS  
 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS  
 33:CLASS 34:CLASS 47:CLASS 48:CLASS 50:CLASS 59:CLASS 60:CLASS 61:CLASS  
 62:CLASS 64:Atom 65:Atom 66:Atom 72:CLASS 73:CLASS 75:CLASS 76:CLASS

Generic attributes :

22:

Saturation : Saturated  
 Number of Carbon Atoms : less than 7

48:

Saturation : Saturated  
 Number of Carbon Atoms : less than 7

Element Count :

Node 22: Limited  
 C,C1-4

Node 48: Limited  
 C,C1-4

L7 STRUCTURE UPLOADED

=> que L7 AND L5 NOT L6

L8 QUE L7 AND L5 NOT L6

=> d 18

L8 HAS NO ANSWERS

L5 SCR 2005

L6 SCR 2016 OR 2039 OR 2040 OR 2045 OR 2047

L7 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

L8 QUE L7 AND L5 NOT L6

=> s 18 sss sam

SAMPLE SEARCH INITIATED 10:38:29 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 26194 TO ITERATE

7.6% PROCESSED 2000 ITERATIONS

1 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 514193 TO 533567

PROJECTED ANSWERS: 44 TO 478

L9 1 SEA SSS SAM L7 AND L5 NOT L6

=> => s 18 sss ful

FULL SEARCH INITIATED 10:39:10 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 525766 TO ITERATE

100.0% PROCESSED 525766 ITERATIONS

343 ANSWERS

SEARCH TIME: 00.00.07

L10 343 SEA SSS FUL L7 AND L5 NOT L6

=> => s 110

L11 121 L10

=> d 111 1-50 bib,ab,hitstr

L11 ANSWER 1 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2009:762006 CAPLUS

DN 151:94705

TI Preparations of oligonucleotide analogs with promoted resistance to nucleases and knock-down effects

IN Kitade, Yukio; Ueno, Yoshihito  
 PA Gifu University, Japan

SO Jpn. Kokai Tokkyo Koho, 29pp.  
 CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2009136157	A	20090625 20071203	JP 2007-312713	20071203
PRAI JP 2007-312713				
OS MARPAT 151:94705				

AB Oligonucleotides containing nucleoside analogs I (R<sub>1</sub> = purine, pyrimidine, or their analogs containing F or Cl; R<sub>2</sub> = lipophilic moiety such as OCOR<sub>21</sub>, O(CH<sub>2</sub>)<sub>x</sub>R<sub>22</sub>, OR<sub>23</sub>, NHR<sub>24</sub> (x = 1-3); a, b, c, d = 1-10; R<sub>21</sub>, R<sub>24</sub> = aryl or alkyl with(out) substitution, R<sub>22</sub> = aryl with(out) substitution) which exhibit enhanced resistance to nucleases and knock-down effects have been provided. The oligonucleotides containing the base analogs can hybridize to form duplex strands. These oligonucleotides or their salts are applied to the gene targeted (gene knock-down, RNA interference) for therapeutic purposes and administered to the patients with diseases caused by abnormal over transcription of the target genes for suppression. The oligonucleotides containing the base analogs or their salts are also applied as hybridization probes to detect the gene associated with diseases. The probes made of the oligonucleotides containing the base analogs are provided as the part of DNA chip in the diagnostic test kit.

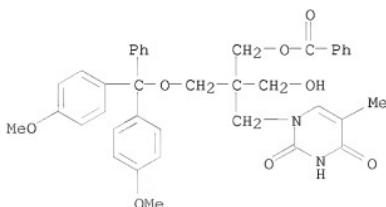
IT 1162644-97-4DP, conjugates with CPG resin  
 1162644-98-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

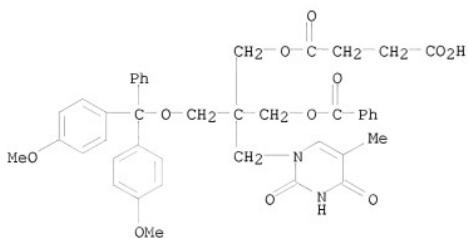
(preps. of oligonucleotide analogs with promoted resistance to nucleases and knock-down effects)

RN 1162644-97-4 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(benzoyloxy)-2-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-2-(hydroxymethyl)propyl]-5-methyl- (CA INDEX NAME)

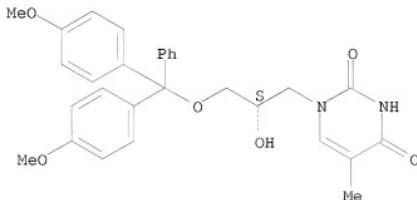


RN 1162644-98-5 CAPLUS  
CN INDEX NAME NOT YET ASSIGNED



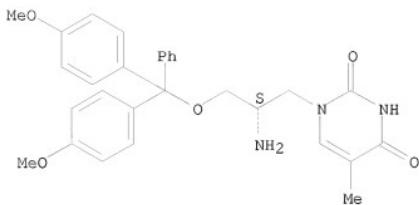
L11 ANSWER 2 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2009:102901 CAPLUS  
 DN 150:230451  
 TI N2' → P3' phosphoramidate glycerol nucleic acid as a potential alternative genetic system  
 AU Chen, Jesse J.; Cai, Xin; Szostak, Jack W.  
 CS Howard Hughes Medical Institute, Department of Molecular Biology and Center for Computational and Integrative Biology, Massachusetts General Hospital, Boston, MA, 02114, USA  
 SO Journal of the American Chemical Society (2009), 131(6), 2119-2121  
 CODEN: JACSAT; ISSN: 0002-7863  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB Glycerol nucleic acid (GNA) is an interesting base-pairing system with an acyclic, three-carbon backbone. In the present study, GNA analogs with N2' → P3' phosphoramidate linkages (npGNA) have been synthesized and their base-pairing properties examined. Thermal denaturation and CD studies show that npGNA can form stable duplexes with itself and with GNA. Furthermore, we show that npGNA can be assembled by template-directed ligation of 3'-imidazole-activated-2'-amino GNA dinucleotides. These results suggest that npGNA is a potential candidate for a self-replicating system based upon phosphoramidate linkages.  
 IT 168332-12-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (n2' → P3' phosphoramidate glycerol nucleic acid as potential alternative genetic system)  
 RN 168332-12-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



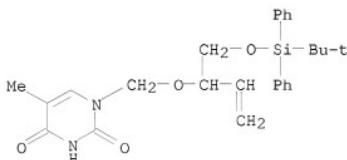
IT 1112280-22-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (n2' → P3' phosphoramidate glycerol nucleic acid as potential alternative genetic system)  
 RN 1112280-22-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-2-amino-3-[bis(4-methoxyphenyl)phenylmethoxy]propyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

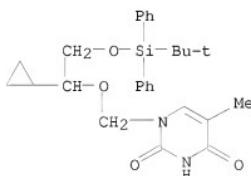


OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

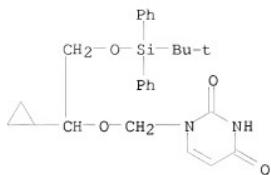
L11 ANSWER 3 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2008:1383646 CAPLUS  
 DN 149:575976  
 TI Synthesis of nucleosides  
 AU Vorbrueggen, Helmut; Ruh-Pohlenz, Carmen  
 CS Research Laboratories of Schering AG, Berlin, Germany  
 SO Organic Reactions (Hoboken, NJ, United States) (2000), 55, No pp. given  
 CODEN: ORHNBA  
 URL: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/107610747/HOME>  
 PB John Wiley & Sons, Inc.  
 DT Journal; General Review; (online computer file)  
 LA English  
 OS CASREACT 149:575976  
 AB A review of the article Synthesis of nucleosides.  
 IT 136083-18-6P 141619-32-1P 141619-35-4P  
 146061-97-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (Synthesis Of Nucleosides)  
 RN 136083-18-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[1-[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-2-propen-1-yl]oxy)methyl]-5-methyl-  
 (CA INDEX NAME)



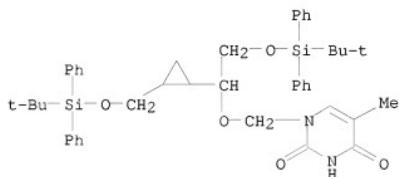
RN 141619-32-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[1-cyclopropyl-2-[(1,1-dimethylethyl)diphenylsilyl]oxy]ethoxy]methyl]-5-methyl- (CA INDEX NAME)



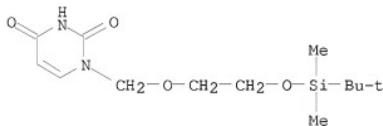
RN 141619-35-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[1-cyclopropyl-2-[(1,1-dimethylethyl)diphenylsilyl]oxy]ethoxy]methyl]- (CA INDEX NAME)



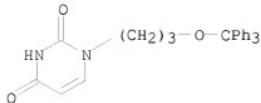
RN 146061-97-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-[(1,1-dimethylethyl)diphenylsilyloxy]-1-[2-[(1,1-dimethylethyl)diphenylsilyloxy]methyl]cyclopropyl)ethoxy]methyl-5-methyl- (CA INDEX NAME)



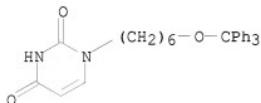
L11 ANSWER 4 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2008:1134021 CAPLUS  
 DN 149:548245  
 TI Application of molecular topology to the prediction of the antimalarial activity of a group of uracil-based acyclic and deoxyuridine compounds  
 AU Garcia-Domenech, Ramon; Lopez-Pena, Wanda; Sanchez-Perdomo, Yesenia;  
 Sanders, Jose R.; Sierra-Araujo, Mercedes M.; Zapata, Claudio; Galvez,  
 Jorge  
 CS Department Quimica Fisica, Facultad de Farmacia, Universitat de Valencia,  
 Valencia, 46100, Spain  
 SO International Journal of Pharmaceutics (2008), 363(1-2), 78-84  
 CODEN: IJPHDE; ISSN: 0378-5173  
 PB Elsevier B.V.  
 DT Journal  
 LA English  
 AB A topol.-math. model has been arranged to search for new derivs. of deoxyuridine and related compds. acting as antimalarials against Plasmodium falciparum. By using linear discriminant and multilinear regression anal. a model with two functions was capable to predict adequately the IC50 for each compound of the training and test series. After carrying out a virtual screening based upon such a model, new structures potentially active against P. falciparum are proposed.  
 IT 121749-94-8 860266-80-4 860266-81-5  
 860266-83-7 860266-84-8 860266-85-9  
 860266-87-1 860266-88-2 860266-89-3  
 860266-90-6 860266-91-7 860266-92-8  
 860266-93-9 860266-94-0 860266-96-2  
 860267-03-4 860267-11-4 904907-21-7  
 904907-23-9 904907-27-3 904907-28-4  
 1027312-28-2  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (application of mol. topol. to the prediction of antimalarial activity of a group of uracil-based acyclic and deoxyuridine compds.)  
 RN 121749-94-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(1,1-dimethyl ethyl)dimethylsilyl]oxy]ethoxy]methyl]- (CA INDEX NAME)



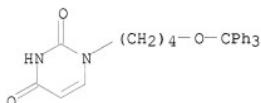
RN 860266-80-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(triphenylmethoxy)propyl]- (CA INDEX NAME)



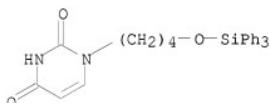
RN 860266-81-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-(triphenylmethoxy)hexyl]- (CA INDEX NAME)



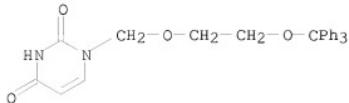
RN 860266-83-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-(triphenylmethoxy)butyl]- (CA INDEX NAME)



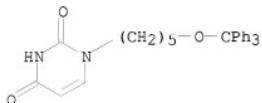
RN 860266-84-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[(triphenylsilyl)oxy]butyl]- (CA INDEX NAME)



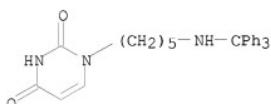
RN 860266-85-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-(triphenylmethoxy)ethoxy)methyl]- (CA INDEX NAME)



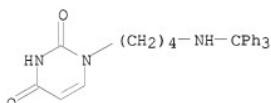
RN 860266-87-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-(triphenylmethoxy)pentyl]- (CA INDEX NAME)



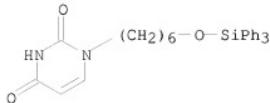
RN 860266-88-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-[(triphenylmethyl)amino]pentyl]- (CA INDEX NAME)



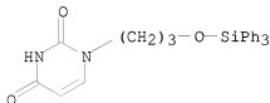
RN 860266-89-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)



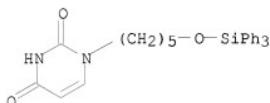
RN 860266-90-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-[(triphenylsilyl)oxy]hexyl]- (CA INDEX NAME)



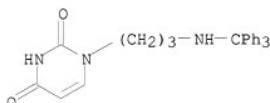
RN 860266-91-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(triphenylsilyl)oxy]propyl]- (CA INDEX NAME)



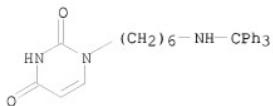
RN 860266-92-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-[(triphenylsilyl)oxy]pentyl]- (CA INDEX NAME)



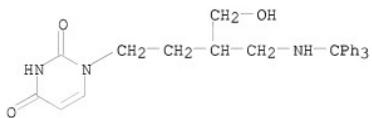
RN 860266-93-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(triphenylmethyl)amino]propyl]- (CA INDEX NAME)



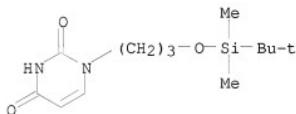
RN 860266-94-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-[(triphenylmethyl)amino]hexyl]- (CA INDEX NAME)



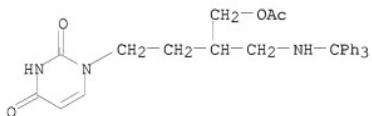
RN 860266-96-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(hydroxymethyl)-4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)



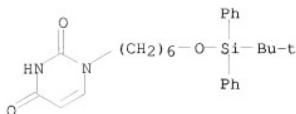
RN 860267-03-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(1,1-dimethylethyl)dimethylsilyloxy]propyl]- (CA INDEX NAME)



RN 860267-11-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(acetyloxy)methyl]-4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)

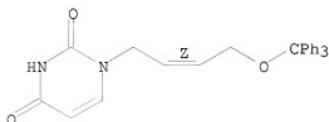


RN 904907-21-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-[(1,1-dimethylethyl)diphenylsilyloxy]hexyl]- (CA INDEX NAME)

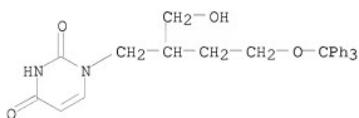


RN 904907-23-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2Z)-4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)

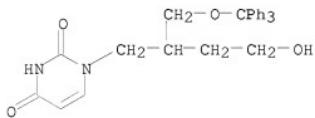
Double bond geometry as shown.



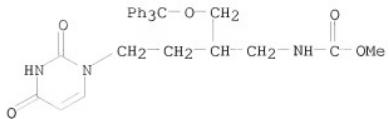
RN 904907-27-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-(hydroxymethyl)-4-(triphenylmethoxy)butyl]- (CA INDEX NAME)



RN 904907-28-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-hydroxy-2-[(triphenylmethoxy)methyl]butyl]- (CA INDEX NAME)



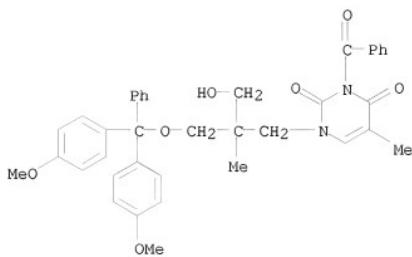
RN 1027312-28-2 CAPLUS  
 CN Carbanic acid, N-[4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(triphenylmethoxy)methyl]butyl]-, methyl ester (CA INDEX NAME)



RE.CNT 29

THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2008:1087794 CAPLUS  
 DN 149:524541  
 TI Synthesis, structural studies and biological properties of new TBA analogues containing an acyclic nucleotide  
 AU Coppola, Teresa; Varra, Michela; Oliviero, Giorgia; Galeone, Aldo; D'Isa, Giuliana; Mayol, Luciano; Morello, Elena; Bucci, Maria-Rosaria; Vellecco, Valentina; Cirino, Giuseppe; Borbone, Nicola  
 CS Dipartimento di Chimica delle Sostanze Naturali, Universita degli Studi di Napoli "Federico II", Naples, 80131 Italy  
 SO Bioorganic & Medicinal Chemistry (2008), 16(17), 8244-8253  
 CODEN: BMECEP; ISSN: 0968-0896  
 PB Elsevier Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 149:524541  
 AB A new modified acyclic nucleoside, namely N-1-(3-hydroxy-2-hydroxymethyl-2-methylpropyl)-thymidine, was synthesized and transformed into a building block useful for oligonucleotide (ON) automated synthesis. A series of modified thrombin binding aptamers (TBAs) in which the new acyclic nucleoside replaces, one at the time, the thymidine residues were then synthesized and characterized by UV, CD, MS, and 1H NMR. The biol. activity of the resulting TBAs was tested by Prothrombin Time assay (PT assay) and by purified fibrinogen clotting assay. From a structural point of view, nearly all the new TBA analogs show a similar behavior as the unmodified counterpart, being able to fold into a bimol. or monomol. quadruplex structure depending on the nature of monovalent cations (sodium or potassium) coordinated in the quadruplex core. From the comparison of structural and biol. data, some important structure-activity relationships emerged, particularly when the modification involved the T7 loops. In agreement with previous studies the authors found that the folding ability of TBA analogs is more affected by modifications involving positions 4 and 13, rather than positions 3 and 12. On the other hand, the highest antithrombin activities were detected for aptamers containing the modification at T13 or T12 positions, thus indicating that the effects produced by the introduction of the acyclic nucleoside on the biol. activity are not tightly connected with structure stabilities. It is noteworthy that the modification at T7 produces an ON being more stable and active than the natural TBA.  
 IT 1075753-83-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis, structural studies and biol. properties of new TBA analogs containing an acyclic nucleotide)  
 RN 1075753-83-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-(hydroxymethyl)-2-methylpropyl]-5-methyl- (CA INDEX NAME)

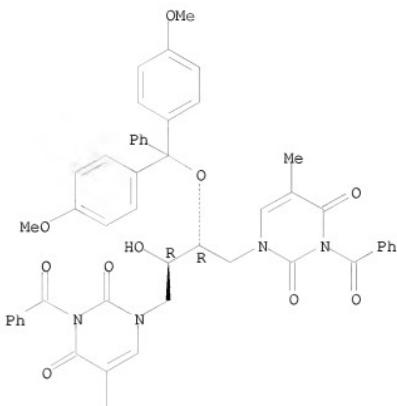


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:1424791 CAPLUS  
 DN 148:262838  
 TI Synthetic nucleic acid secondary structures containing the four stereoisomers of 1,4-bis(thymine-1-yl)butane-2,3-diol  
 AU Christensen, Mikkel S.; Bond, Andrew D.; Nielsen, Poul  
 CS Nucleic Acid Center, University of Southern Denmark, Odense M, 5230, Den.  
 SO Organic & Biomolecular Chemistry (2008), 6(1), 81-91  
 CODEN: OBCRAK; ISSN: 1477-0520  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 148:262838  
 AB The four stereoisomers of the double-headed acyclic nucleoside 1,4-bis(thymine-1-yl)butane-2,3-diol were incorporated in the central position of four 13-mer oligonucleotides. The phosphoramidite building blocks were synthesized in four or six steps from either D- or L-2,3-O-isopropylidene-threitol. Two epimeric and fully deprotected double-headed nucleosides were analyzed by X-ray crystallog. The incorporation into oligonucleotides was hampered by steric hindrance and formation of a cyclic phosphate. The use of pyridinium chloride as the activator and a kinetic anal. based on 31P NMR of the coupling and detritylation processes led to improved yields of the oligonucleotides. In comparison with the (S)-GNA monomer, one of the four stereoisomers was found to show a similar destabilization of a DNA duplex, indicating that the addnl. base can be introduced without a thermal penalty. Another stereoisomer was found to induce a thermal stabilization of a DNA:RNA three-way junction. Thus, the stereochem. of this acyclic double-headed nucleoside motif is important, indicating potential for the design of artificial nucleic acid secondary structures.  
 IT 1006048-45-8P 1006048-46-9P 1006048-49-2P  
 1006048-50-5P 1006048-51-6P 1006048-52-7P  
 1006048-53-8P 1006048-54-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthetic nucleic acid secondary structures containing four stereoisomers of 1,4-bis(thymine-1-yl)butane-2,3-diol)  
 RN 1006048-45-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2R,3R)-2-[bis(4-methoxyphenyl)phenylmethoxy]-3-hydroxy-1,4-butanediyl]bis[3-benzoyl-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



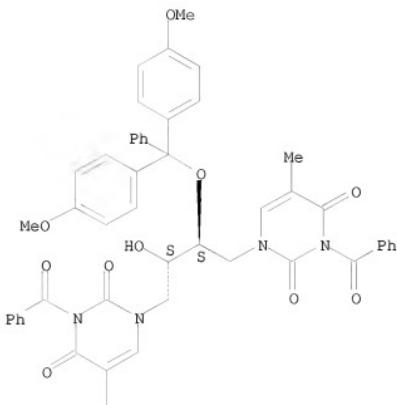
PAGE 2-A



RN 1006048-46-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2S,3S)-2-[bis(4-methoxyphenyl)phenylmethoxy]-3-hydroxy-1,4-butanediyl]bis[3-benzoyl-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

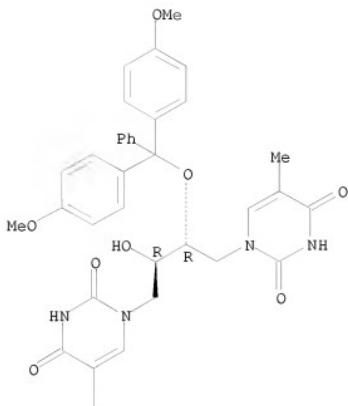


RN 1006048-49-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2R,3R)-2-[bis(4-methoxyphenyl)phenylmethoxy]-3-hydroxy-1,4-butanediyl]bis[5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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PAGE 2-A

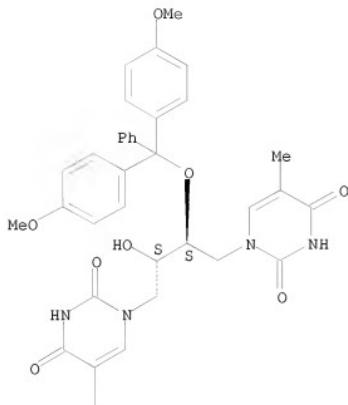


RN 1006048-50-5 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2S,3S)-2-[bis(4-methoxyphenyl)phenylmethoxy]-3-hydroxy-1,4-butanediyl]bis[5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

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PAGE 2-A

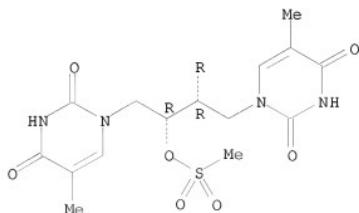


RN 1006048-51-6 CAPLUS

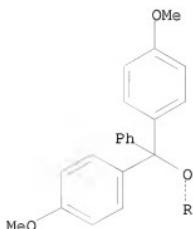
CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2R,3R)-2-[bis(4-methoxyphenyl)methoxy]-3-[(methylsulfonyl)oxy]-1,4-butanediyl]bis[5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

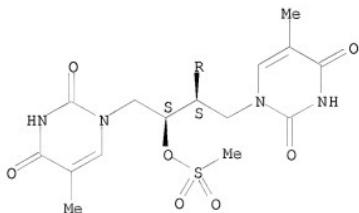


RN 1006048-52-7 CAPLUS

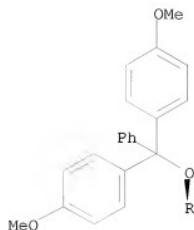
CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2S,3S)-2-[bis(4-methoxyphenyl)phenylmethoxy]-3-[(methylsulfonyl)oxy]-1,4-butanediyl]bis[5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

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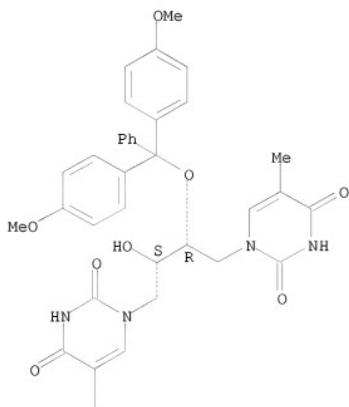
PAGE 2-A



RN 1006048-53-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2R,3S)-2-[bis(4-methoxyphenyl)phenylmethoxy]-3-hydroxy-1,4-butanediyl]bis[5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



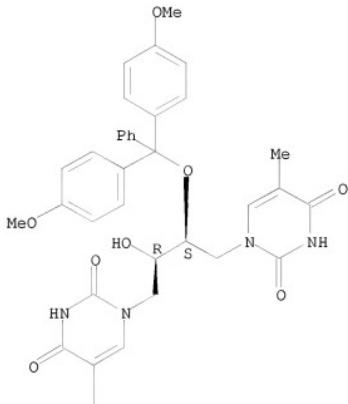
PAGE 2-A



RN 1006048-54-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(*(2S,3R)*-2-[bis(4-methoxyphenyl)phenylmethoxy]-3-hydroxy-1,4-butanediyl]bis[5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

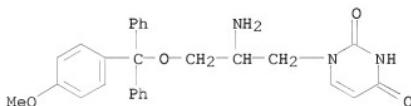


PAGE 2-A

Me

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

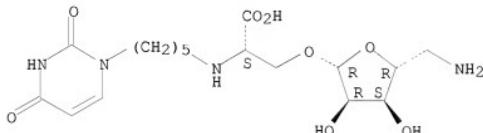
L11 ANSWER 7 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:1393642 CAPLUS  
 DN 149:448661  
 TI Some Novel Aminopropyl Nucleoside Phosphonates  
 AU Zhou, Ding; Lagoja, Irene M.; Van Aerschot, Arthur  
 CS Laboratory of Medicinal Chemistry, Rega Institute, Louvain, Belg.  
 SO Nucleosides, Nucleotides & Nucleic Acids (2007), 26(6-7), 563-566  
 CODEN: NNNAFY; ISSN: 1525-7770  
 PB Taylor & Francis, Inc.  
 DT Journal  
 LA English  
 AB Aminopropyl nucleoside phosphonates have an amino function within either the acyclic chain or as substituent of HPMPC (Cidofovir) were prepared. Both purine and pyrimidine nucleoside analogs have been synthesized. In contrast to HPMPC, only a weak antiherpes virus activity could be demonstrated.  
 IT 918869-00-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of aminopropyl nucleoside phosphonates as antiherpes agents)  
 RN 918869-00-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-amino-3-[(4-methoxyphenyl)diphenylmethoxy]propyl]- (CA INDEX NAME)



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

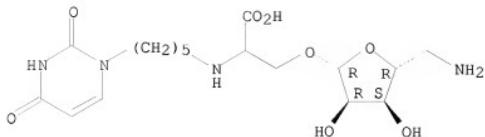
L11 ANSWER 8 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:1374612 CAPLUS  
 DN 148:144992  
 TI Towards new MraY inhibitors: a serine template for uracil and 5-amino-5-deoxyribosyl scaffolding  
 AU Le Corre, Laurent; Gravier-Pelletier, Christine; Le Merrer, Yves  
 CS Laboratoire de Chimie et Biochimie Pharmacologiques et Toxicologiques, Universite Paris Descartes, CNRS UMR, Paris Cedex 06, Fr.  
 SO European Journal of Organic Chemistry (2007), (32), 5386-5394  
 CODEN: EJOCFK; ISSN: 1434-193X  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 OS CASREACT 148:144992  
 AB The bacterial translocase MraY is a good target for the development of new antibiotics as it is ubiquitous and essential for bacterial growth. The goal of this work was the synthesis of simplified analogs of naturally occurring inhibitors of this enzyme to investigate the essential character of the uridine moiety of these inhibitors with regards to biol. activity. Thus, the structure of the targeted enantiomerically pure N-(uracilylpentyl)- $\beta$ -D-O-(5-amino-5-deoxyribosyl)-L-serine retains uracil and 5-amino-5-deoxyribose parts linked by a serinyl template. The synthetic strategy towards this compound relies on sequential O-glycosylation and N-alkylation by reductive amination of a serine derivative  
 IT 1001671-07-3P  
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation of (uracilylpentyl)(aminodeoxyribosyl)serine as a potential inhibitor of translocase MraY for development of antibiotics)  
 RN 1001671-07-3 CAPLUS  
 CN L-Serine, O-(5-amino-5-deoxy- $\beta$ -D-ribofuranosyl)-N-[5-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)pentyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 1001671-12-0P  
 RL: BYP (Byproduct); PREP (Preparation)  
 (preparation of (uracilylpentyl)(aminodeoxyribosyl)serine as a potential inhibitor of translocase MraY for development of antibiotics)  
 RN 1001671-12-0 CAPLUS  
 CN Serine, O-(5-amino-5-deoxy- $\beta$ -D-ribofuranosyl)-N-[5-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)pentyl]- (CA INDEX NAME)

Absolute stereochemistry.



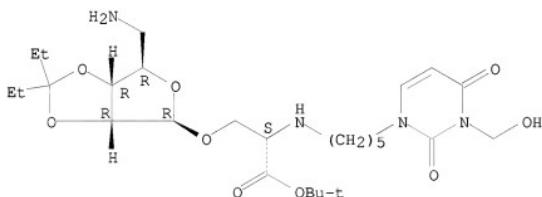
IT 1001671-11-9P 1001671-14-2P 1001671-15-3P  
 1001671-16-4P 1001671-18-6P 1001671-23-3P  
 1001671-24-4P 1001671-25-5P 1001671-26-6P  
 1001671-27-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of (uracilpentyl)(aminodeoxyribosyl)serine as a potential inhibitor of translocase MraY for development of antibiotics)

RN 1001671-11-9 CAPLUS

CN L-Serine, O-[5-amino-5-deoxy-2,3-O-(1-ethylpropylidene)- $\beta$ -D-ribofuranosyl]-N-[5-[3,4-dihydro-3-(hydroxymethyl)-2,4-dioxo-1(2H)-pyrimidinyl]pentyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

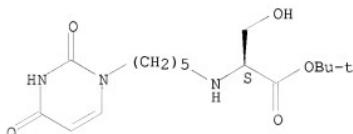
Absolute stereochemistry.



RN 1001671-14-2 CAPLUS

CN L-Serine, N-[5-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)pentyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

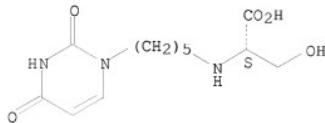


RN 1001671-15-3 CAPLUS

CN L-Serine, N-[5-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)pentyl]- (CA

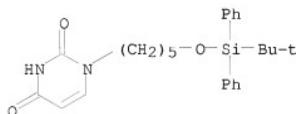
INDEX NAME)

Absolute stereochemistry.



RN 1001671-16-4 CAPLUS

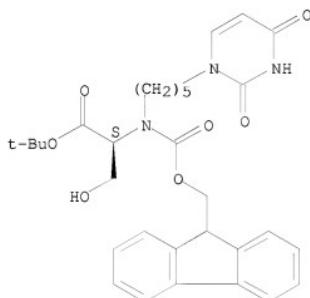
CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-[(1,1-dimethylethyl)diphenylsilyloxy]penty]- (CA INDEX NAME)



RN 1001671-18-6 CAPLUS

CN L-Serine, N-[5-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)pentyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

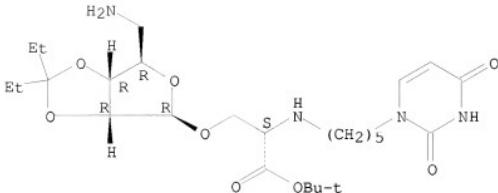
Absolute stereochemistry. Rotation (-).



RN 1001671-23-3 CAPLUS

CN L-Serine, O-[5-amino-5-deoxy-2,3-O-(1-ethylpropylidene)-β-D-ribofuranosyl]-N-[5-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)pentyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

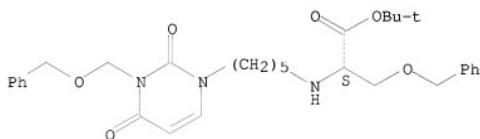
Absolute stereochemistry. Rotation (-).



RN 1001671-24-4 CAPLUS

CN L-Serine, N-[5-[3,4-dihydro-2,4-dioxo-3-[(phenylmethoxy)methyl]-1(2H)-pyrimidinyl]pentyl]-O-(phenylmethyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

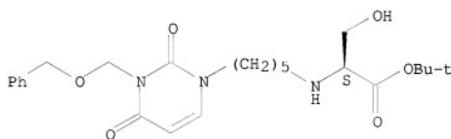
Absolute stereochemistry. Rotation (-).



RN 1001671-25-5 CAPLUS

CN L-Serine, N-[5-[3,4-dihydro-2,4-dioxo-3-[(phenylmethoxy)methyl]-1(2H)-pyrimidinyl]pentyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

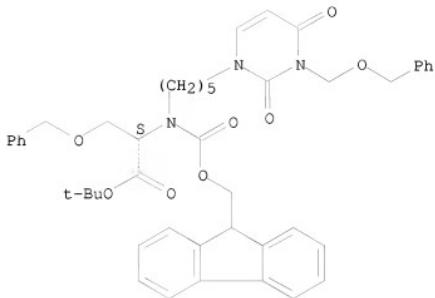
Absolute stereochemistry. Rotation (-).



RN 1001671-26-6 CAPLUS

CN L-Serine, N-[5-[3,4-dihydro-2,4-dioxo-3-[(phenylmethoxy)methyl]-1(2H)-pyrimidinyl]pentyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-O-(phenylmethyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

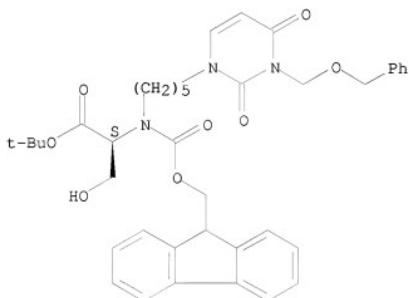
Absolute stereochemistry. Rotation (-).



RN 1001671-27-7 CAPLUS

CN L-Serine, N-[5-[3,4-dihydro-2,4-dioxo-3-[(phenylmethoxy)methyl]-1(2H)-pyrimidinyl]pentyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

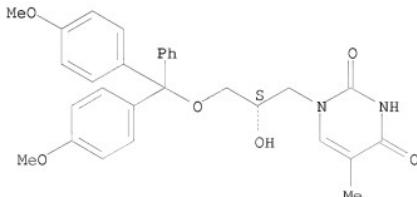
Absolute stereochemistry. Rotation (-).



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 9 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:1142935 CAPLUS  
 DN 148:256274  
 TI Experimental Evidence That GNA and TNA Were Not Sequential Polymers in the Prebiotic Evolution of RNA  
 AU Yang, Ying-Wei; Zhang, Su; McCullum, Elizabeth O.; Chaput, John C.  
 CS The Center for BioOptical Nanotechnology, The Biodesign Institute, and Department of Chemistry and Biochemistry, Arizona State University, Tempe, AZ, 85287, USA  
 SO Journal of Molecular Evolution (2007), 65(3), 289-295  
 CODEN: JMEVAU; ISSN: 0022-2844  
 PB Springer  
 DT Journal  
 LA English  
 OS CASREACT 148:256274  
 AB Systematic investigation into the chemical etiol. of ribose has led to the discovery of glycerol nucleic acid (GNA) and threose nucleic acid (TNA) as possible progenitor candidates of RNA in the origins of life. Coupled with their chemical simplicity, polymers for both systems are capable of forming stable Watson-Crick antiparallel duplex structures with themselves and RNA, thereby providing a mechanism for the transfer of genetic information between successive genetic systems. Investigation into whether both polymers arose independently or descended from a common evolutionary pathway would provide addnl. constraints on models that describe the emergence of a hypothetical RNA world. Here we show by thermal denaturation that complementary GNA and TNA mixed sequence polymers are unable, even after prolonged incubation times, to adopt stable helical structures by intersystem cross-pairing. This exptl. observation suggests that GNA and TNA, whose structures derive from one another, were not consecutive polymers in the same evolutionary pathway to RNA.  
 IT 168332-12-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (exptl. evidence that GNA and TNA were not sequential polymers in prebiotic evolution of RNA)  
 RN 168332-12-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

10/585,283

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:1064569 CAPLUS  
 DN 147:357157  
 TI Prevention and treatment of cancer and other diseases  
 IN Bondarev, Igor E.  
 PA Alt Solutions, Inc., USA  
 SO PCT Int. Appl., 94 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English  
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007106561	A2	20070920	WO 2007-US6538	20070314
WO 2007106561	A3	20080814		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
WO 2006125166	A2	20061123	WO 2006-US19488	20060518
WO 2006125166	A9	20080320		
WO 2006125166	A3	20090611		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
CA 2644297	A1	20070920	CA 2007-2644297	20070314
EP 2001488	A2	20081217	EP 2007-753185	20070314
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
CN 101443021	A	20090527	CN 2007-80017408	20081113
US 20090203636	A1	20090813	US 2009-225199	20090129
PRAI US 2006-782559P	P	20060314		
US 2006-801693P	P	20060518		
WO 2006-US19488	A	20060518		
US 2006-860518P	P	20061121		
US 2005-682110P	P	20050518		
US 2006-801698P	P	20060520		
WO 2007-US6538	W	20070314		
AB Nucleoside chemical compds., which interact with specific structures of DNA				

(DNA) or RNA (RNA) are disclosed. The compds. interfere with the activities of telomerase and reverse transcriptase, and are useful as antivirals, antibacterials and anticancer agents. Methods of treating or preventing cancers in patients involving administration of a therapeutically effective amount of a composition having an inhibitor or antagonist of the reverse transcriptases (RTs) expressed in cells of the patients are also disclosed. Method of using nucleoside analogs and other inhibitors of RTs in conjunction with DNA damaging agents such as genotoxic agents or radiation or photodynamic therapy or combinations these for the treatment of various cancers are also disclosed. Administration of an acyclic nucleoside analog combination comprised of Retrovir, Zovirax, Valcyte and Valtrex along with genotoxic agent, Xeloda, to a patient suffering from inoperable stomach carcinoma prevented tumor growth based on examination of the abdominal cavity. Acyclic nucleoside analogs and prodrugs were prepared and their antitumor activity in vitro in osteosarcoma cells was evaluated.

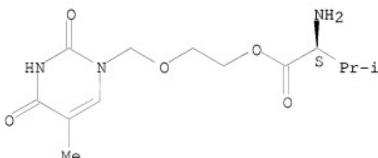
IT 949891-65-0P

RL: ADV (Adverse effect, including toxicity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(acyclic nucleoside analog combinations for prevention and treatment of cancer)

RN 949891-65-0 CAPLUS

CN L-Valine, 2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]ethyl ester, hydrochloride, hydrate (1:1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

● H<sub>2</sub>O

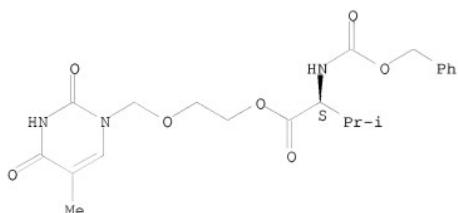
IT 949891-63-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(acyclic nucleoside analog combinations for prevention and treatment of cancer)

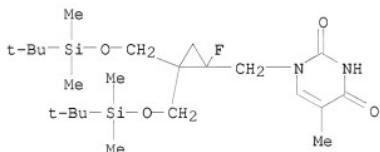
RN 949891-63-8 CAPLUS

CN L-Valine, N-[(phenylmethoxy)carbonyl]-, 2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]ethyl ester (CA INDEX NAME)

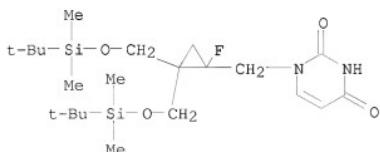
Absolute stereochemistry.



L11 ANSWER 11 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:606948 CAPLUS  
 DN 148:496262  
 TI Short synthesis and antiviral evaluation of C-fluoro-branched cyclopropyl nucleosides  
 AU Oh, Chang Hyun; Hong, Joon Hee  
 CS Medicinal Chemistry Research Center, Korea Institute of Science and Technology, Seoul, S. Korea  
 SO Nucleosides, Nucleotides & Nucleic Acids (2007), 26(4), 403-411  
 CODEN: NNNAFY; ISSN: 1525-7770  
 PB Taylor & Francis, Inc.  
 DT Journal  
 LA English  
 OS CASREACT 148:496262  
 AB A series of novel fluorocyclopropyl nucleosides were synthesized using the Simmons-Smith reaction as a key reaction starting from 1,3-dihydroxyacetone. All the nucleosides synthesized were assayed against several viruses. Among the compds. synthesized, the 5-fluorouracil analog showed significant anti-HCMV activity (9.22 μM).  
 IT 1021327-75-2P 1021327-76-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and antiviral activity of C-fluoro-branched cyclopropyl nucleosides)  
 RN 1021327-75-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2,2-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1-fluorocyclopropyl)methyl]-5-methyl- (CA INDEX NAME)



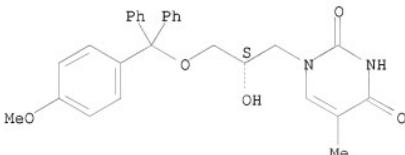
RN 1021327-76-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2,2-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1-fluorocyclopropyl)methyl]- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

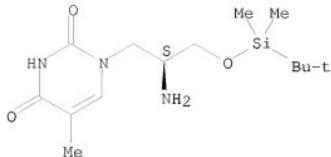
L11 ANSWER 12 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:494023 CAPLUS  
 DN 147:183202  
 TI Chemical etiology of nucleic acids: aminopropyl nucleic acids (APNAs)  
 AU Zhou, Ding; Froeyen, Matheus; Rozenski, Jozef; Van Aerschot, Arthur;  
 Herdewijn, Piet  
 CS Laboratory of Medicinal Chemistry, Rega Institute for Medical Research,  
 Katholieke Universiteit Leuven, Louvain, B-3000, Belg.  
 SO Chemistry & Biodiversity (2007) 4(4), 740-761  
 CODEN: CBBIAM; ISSN: 1612-1872  
 PB Verlag Helvetica Chimica Acta AG  
 DT Journal  
 LA English  
 AB Aminopropyl nucleic acids (APNAs) are constitutionally simple nucleic acid  
 alternatives with one stereogenic center per nucleotide, and with the  
 potential to hybridize with RNA and to exert catalytic functions. We have  
 developed a protecting group strategy to synthesize APNAs, although in a  
 not very efficient way. Isolation and purification of APNAs proved to be  
 difficult. Their structures might be more suited to function as potential  
 catalytic polymers than as information systems that may evolve into RNA.  
 IT 944132-80-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of aminopropyl nucleoside derivs. (APNs))  
 RN 944132-80-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-2-hydroxy-3-[(4-  
 methoxyphenyl)diphenylmethoxy]propyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.



IT 944132-84-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of aminopropyl nucleoside derivs. (APNs))  
 RN 944132-84-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-2-amino-3-[(1,1-  
 dimethylethyl)dimethylsilyl]oxy]propyl]-5-methyl- (CA INDEX NAME)

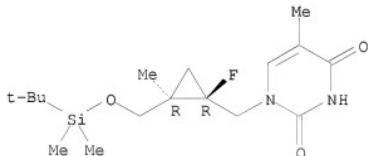
Absolute stereochemistry.



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

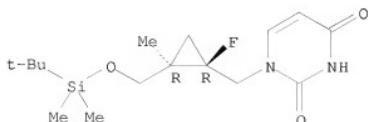
L11 ANSWER 13 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:403424 CAPLUS  
 DN 147:53090  
 TI Synthesis and antiviral activity of C-fluoro-branched cyclopropyl nucleosides  
 AU Kim, Aihong; Hong, Joon Hee  
 CS College of Pharmacy, Chosun University, Kwangju, 501-759, S. Korea  
 SO European Journal of Medicinal Chemistry (2007), 42(4), 487-493  
 CODEN: EJMCAB; ISSN: 0223-5234  
 PB Elsevier B.V.  
 DT Journal  
 LA English  
 OS CASREACT 147:53090  
 AB A series of novel fluorocyclopropyl nucleosides were synthesized starting from acetol using the Simmons-Smith reaction as a key reaction. All the nucleosides synthesized were assayed against several viruses. Among the compds. synthesized, I, (B is uracil), showed moderate anti-HCMV activity (10.61 µg/mL, in AD-169).  
 IT 940003-91-8P 940003-92-9P 940003-95-2P  
 940003-96-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis, cytotoxicity and antiviral activity of C-fluoro-branched cyclopropyl nucleosides)  
 RN 940003-91-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2R)-2-[[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1-fluoro-2-methylcyclopropyl)methyl]-5-methyl-, rel- (CA INDEX NAME)

## Relative stereochemistry.



RN 940003-92-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2R)-2-[[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1-fluoro-2-methylcyclopropyl)methyl]-, rel- (CA INDEX NAME)

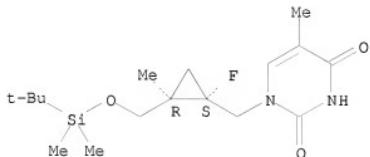
## Relative stereochemistry.



RN 940003-95-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2S)-2-[(1,1-dimethylethyl)dimethylsilyl]oxy)methyl]-1-fluoro-2-methylcyclopropylmethyl]-5-methyl-, rel- (CA INDEX NAME)

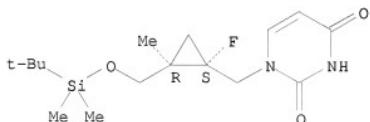
Relative stereochemistry.



RN 940003-96-3 CAPLUS

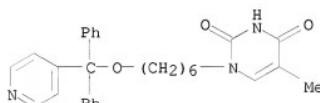
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2S)-2-[(1,1-dimethylethyl)dimethylsilyl]oxy)methyl]-1-fluoro-2-methylcyclopropylmethyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.



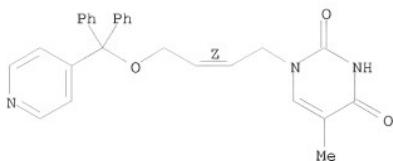
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)  
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2006:1288478 CAPLUS  
 DN 146:176173  
 TI N1-Substituted Thymine Derivatives as Mitochondrial Thymidine Kinase (TK-2) Inhibitors  
 AU Hernandez, Ana-Isabel; Familiar, Olga; Negri, Ana; Rodriguez-Barrios, Fatima; Gago, Federico; Karlsson, Anna; Camarasa, Maria-Jose; Balzarini, Jan; Perez-Perez, Maria-Jesus  
 CS Instituto de Quimica Medica (C.S.I.C.), Madrid, E-28006, Spain  
 SO Journal of Medicinal Chemistry (2006), 49(26), 7766-7773  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 146:176173  
 AB Novel N1-substituted thymine derivs. related to 1-[(Z)-4-(triphenylmethoxy)-2-butenyl]thymine have been synthesized and evaluated against thymidine kinase-2 (TK-2) and related nucleoside kinases [i.e., Drosophila melanogaster deoxynucleoside kinase (Dm-dNK) and herpes simplex virus type 1 thymidine kinase (HSV-1 TK)]. The thymine base has been tethered to a distal triphenylmethoxy moiety through a polymethylene chain ( $n = 3-8$ ) or through a (2-ethoxyethyl) spacer. Moreover, substitutions at position 4 of one of the Ph rings of the triphenylmethoxy moiety have been performed. Compds. with a hexamethylene spacer (I, II, and III) displayed the highest inhibitory values against TK-2 ( $IC_{50} = 0.3-0.5 \mu M$ ). Compound II competitively inhibited TK-2 with respect to thymidine and uncompetitively with respect to ATP. A rationale for the biol. data was provided by docking some representative inhibitors into a homol.-based model of human TK-2. Moreover, two of the most potent TK-2 inhibitors, I and II, that also inhibit HSV-1 TK were able to reverse the cytostatic activity of 1-( $\beta$ -D-arabinofuranosyl)thymine (Ara-T) and ganciclovir in HSV-1 TK-expressing OST-TK-/HSV-1 TK+ cell cultures.  
 IT 892392-58-4P 921588-11-6P  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (N1-substituted thymine derivs. as mitochondrial thymidine kinase (TK-2) inhibitors)  
 RN 892392-58-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-(diphenyl-4-pyridinylmethoxy)hexyl]-5-methyl- (CA INDEX NAME)



RN 921588-11-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(Z)-4-(diphenyl-4-pyridinylmethoxy)-2-butenyl]-5-methyl- (CA INDEX NAME)

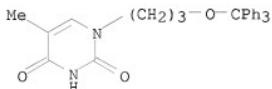
Double bond geometry as shown.



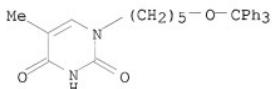
IT 921587-91-9P 921587-92-0P 921587-93-1P  
 921587-94-2P 921587-99-7P 921588-00-3P  
 921588-07-0P 921588-10-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (NI-substituted thymine derivs. as mitochondrial thymidine kinase (TK-2) inhibitors)

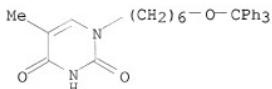
RN 921587-91-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[3-(triphenylmethoxy)propyl]- (CA INDEX NAME)



RN 921587-92-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[5-(triphenylmethoxy)pentyl]- (CA INDEX NAME)

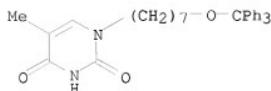


RN 921587-93-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[6-(triphenylmethoxy)hexyl]- (CA INDEX NAME)

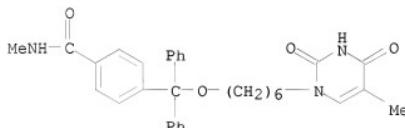


RN 921587-94-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[7-(triphenylmethoxy)heptyl]- (CA INDEX NAME)

INDEX NAME)

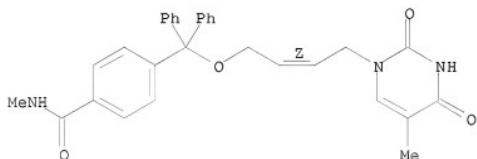


RN 921587-99-7 CAPLUS  
 CN Benzamide, 4-[(6-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)hexyl)oxy]diphenylmethylnamethane (CA INDEX NAME)

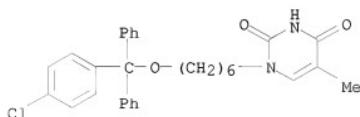


RN 921588-00-3 CAPLUS  
 CN Benzamide, 4-[(2Z)-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-butene-1-yl]oxydiphenylmethylnamethane (CA INDEX NAME)

Double bond geometry as shown.



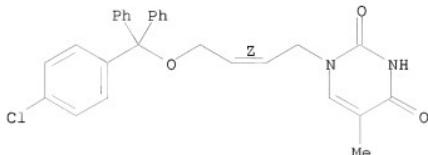
RN 921588-07-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-((4-chlorophenyl)diphenylmethoxy)hexyl]-5-methyl- (CA INDEX NAME)



RN 921588-10-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2Z)-4-((4-chlorophenyl)diphenylmethoxy)-2-

buten-1-yl]-5-methyl- (CA INDEX NAME)

Double bond geometry as shown.



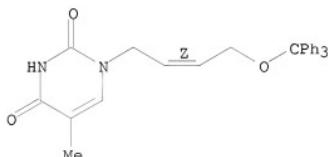
IT 471256-44-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (N1-substituted thymine derivs. as mitochondrial thymidine kinase  
 (TK-2) inhibitors)

RN 471256-44-7 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[(2Z)-4-(triphenylmethoxy)-2-butene-1-yl]- (CA INDEX NAME)

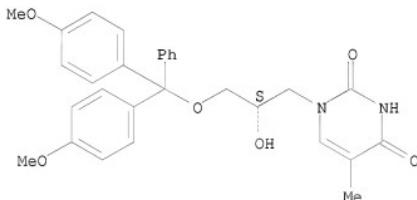
Double bond geometry as shown.



OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)  
 RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

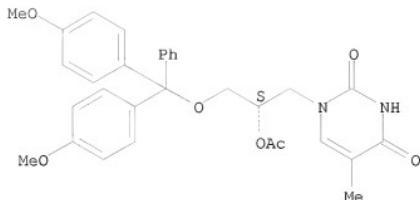
L11 ANSWER 15 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2006:1079301 CAPLUS  
 DN 146:45683  
 TI Glycerol Nucleoside Triphosphates: Synthesis and Polymerase Substrate Activities  
 AU Horhota, Allen T.; Szostak, Jack W.; McLaughlin, Larry W.  
 CS Department of Chemistry, Merkert Chemistry Center, Boston College,  
 Chestnut Hill, MA 02464 USA  
 SO Organic Letters (2006), 8(23), 5345-5347  
 CODEN: ORLEFT; ISSN: 1523-7060  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 146:45683  
 AB The synthesis of (S)-glycerol nucleoside triphosphates (gNTPs) and the anal. of their substrate activities for enzymic polymerization is described. NTPs with simplified carbohydrate backbones such as the tNTPs ( $\alpha$ -L-threose-NTPs) are polymerase substrates and offer the potential to create non-natural aptamer sequences with simplified backbones through enzymic means. The acyclic (S)-GNA was modeled after the shortened  $\alpha$ -threo furanosyl backbone. Here we describe the synthesis of (S)-glycerol NTPs and initial enzymic testing of this further simplified nucleic acid backbone.  
 IT 168332-12-5P 916599-30-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (glycerol nucleoside triphosphates synthesis and polymerase substrate activities)  
 RN 168332-12-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



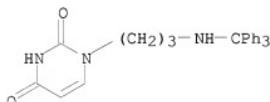
RN 916599-30-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]propyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

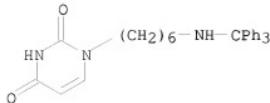


OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)  
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2006:593384 CAPLUS  
 DN 145:201965  
 TI Acyclic Nucleoside Analogues as Inhibitors of Plasmodium falciparum dUTPase  
 AU Nguyen, Corinne; Ruda, Gian Filippo; Schipani, Alessandro; Kasinathan, Ganasan; Leal, Isabel; Musso-Buendia, Alexander; Kaiser, Marcel; Brun, Reto; Ruiz-Perez, Luis M.; Sahlberg, Britt-Louise; Johansson, Nils Gunnar; Gonzalez-Pacanowska, Dolores; Gilbert, Ian H.  
 CS Welsh School of Pharmacy, Cardiff University, Cardiff, CF10 3XF, UK  
 SO Journal of Medicinal Chemistry (2006), 49(14), 4183-4195  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 145:201965  
 AB We report the discovery of novel uracil-based acyclic compds. as inhibitors of deoxyuridine 5'-triphosphate nucleotidohydrolase (dUTPase), an enzyme involved in nucleotide metabolism that has been identified as a promising target for the development of antimalarial drugs. Compds. were assayed against both *P. falciparum* dUTPase and intact parasites. A good correlation was observed between enzyme inhibition and cellular assays. Acyclic uracil derivs. were identified that showed greater or similar potency and in general increased selectivity compared to previously reported inhibitors. The most active compound reported here against the *P. falciparum* enzyme had a Ki of 0.2  $\mu$ M. Mol. modeling studies provided a good rationale for the observed activities. Preliminary ADME studies indicated that some of the lead compds. are drug-like mols. These compds. are useful tools for further investigating *P. falciparum* dUTPase for the development of much-needed novel antimalarial drugs.  
 IT 860266-93-9P 860266-94-0P  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (Acyclic Nucleoside Analogs as Inhibitors of Plasmodium falciparum dUTPase)  
 RN 860266-93-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(triphenylmethyl)amino]propyl]- (CA INDEX NAME)



RN 860266-94-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-[(triphenylmethyl)amino]hexyl]- (CA INDEX NAME)

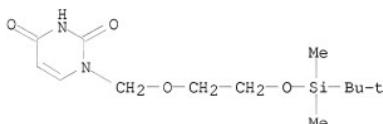


IT 121749-94-8P 860266-80-4P 860266-81-5P  
 860266-83-7P 860266-84-8P 860266-85-9P  
 860266-86-0P 860266-87-1P 860266-88-2P  
 860266-89-3P 860266-90-6P 860266-91-7P  
 860266-92-8P 860266-96-2P 860267-03-4P  
 860267-09-0P 860267-11-4P 904907-21-7P  
 904907-23-9P 904907-27-3P 904907-28-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (Acyclic Nucleoside Analogs as Inhibitors of Plasmodium falciparum dUTPase)

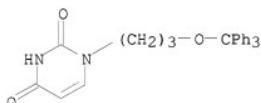
RN 121749-94-8 CAPPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(1,1-dimethyl ethyl)dimethylsilyloxy]ethoxy]methyl- (CA INDEX NAME)



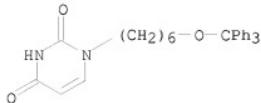
RN 860266-80-4 CAPPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(triphenylmethoxy)propyl]- (CA INDEX NAME)

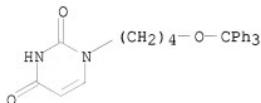


RN 860266-81-5 CAPPLUS

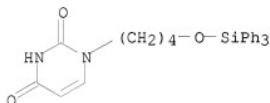
CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-(triphenylmethoxy)hexyl]- (CA INDEX NAME)



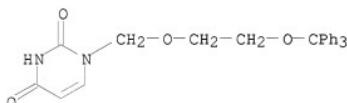
RN 860266-83-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-(triphenylmethoxy)butyl]- (CA INDEX NAME)



RN 860266-84-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-((triphenylsilyloxy)butyl]- (CA INDEX NAME)

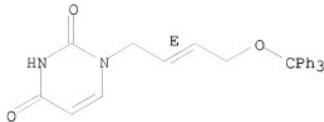


RN 860266-85-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-(triphenylmethoxy)ethoxy)methyl]- (CA INDEX NAME)

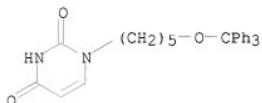


RN 860266-86-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2E)-4-(triphenylmethoxy)-2-butenyl]- (CA INDEX NAME)

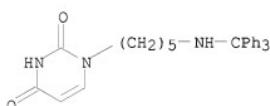
Double bond geometry as shown.



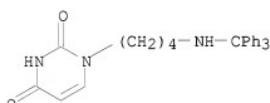
RN 860266-87-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-(triphenylmethoxy)pentyl]- (CA INDEX NAME)



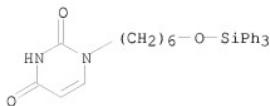
RN 860266-88-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-[(triphenylmethyl)amino]pentyl]- (CA INDEX NAME)



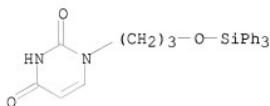
RN 860266-89-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)



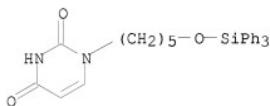
RN 860266-90-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-[(triphenylsilyl)oxy]hexyl]- (CA INDEX NAME)



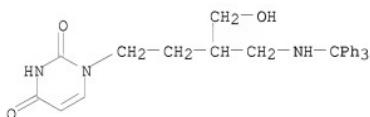
RN 860266-91-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(triphenylsilyl)oxy]propyl]- (CA INDEX NAME)



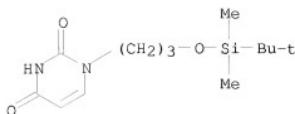
RN 860266-92-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-[(triphenylsilyl)oxy]pentyl]- (CA INDEX NAME)



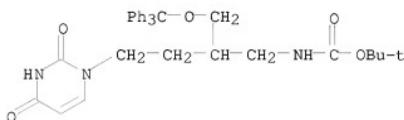
RN 860266-96-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(hydroxymethyl)-4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)



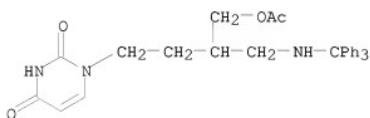
RN 860267-03-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]- (CA INDEX NAME)



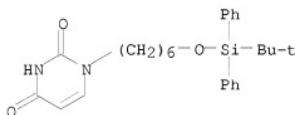
RN 860267-09-0 CAPLUS  
 CN Carbanic acid, [4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(triphenylmethoxy)methyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 860267-11-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(acetyloxy)methyl]-4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)

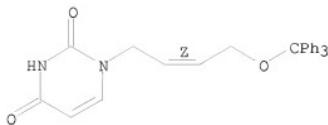


RN 904907-21-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-[(1,1-dimethylethyl)diphenylsilyloxy]hexyl]- (CA INDEX NAME)

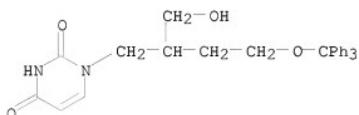


RN 904907-23-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2Z)-4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)

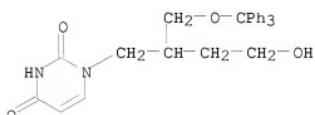
Double bond geometry as shown.



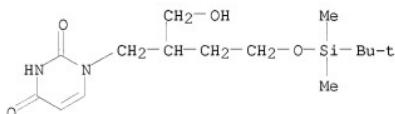
RN 904907-27-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-(hydroxymethyl)-4-(triphenylmethoxy)butyl]- (CA INDEX NAME)



RN 904907-28-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-hydroxy-2-[(triphenylmethoxy)methyl]butyl]- (CA INDEX NAME)



IT 904907-35-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Acyclic Nucleoside Analogs as Inhibitors of Plasmodium falciparum  
 dUTPase)  
 RN 904907-35-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[[((1,1-dimethylethyl)dimethylsilyl)oxy]-2-(hydroxymethyl)butyl]- (CA INDEX NAME)



IT 860266-98-4P 860266-99-5P 860267-00-1P  
 860267-01-2P 904907-36-4P 904907-37-5P  
 904907-39-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

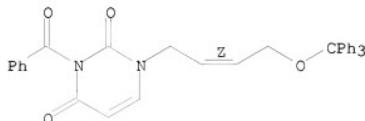
(Reactant or reagent)

(Acyclic Nucleoside Analogs as Inhibitors of Plasmodium falciparum dUTPase)

RN 860266-98-4 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[(2Z)-4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)

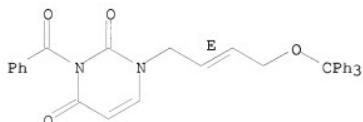
Double bond geometry as shown.



RN 860266-99-5 CAPLUS

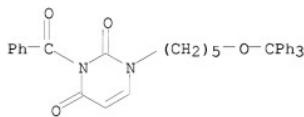
CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[(2E)-4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)

Double bond geometry as shown.



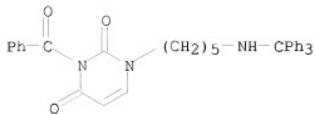
RN 860267-00-1 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[5-(triphenylmethoxy)pentyl]- (CA INDEX NAME)

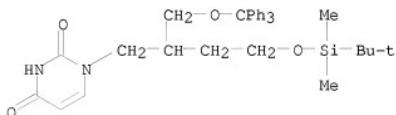


RN 860267-01-2 CAPLUS

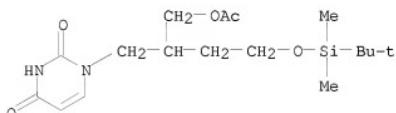
CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[5-[(triphenylmethyl)amino]pentyl]- (CA INDEX NAME)



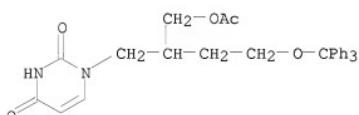
RN 904907-36-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[(1,1-dimethylethyl)dimethylsilyloxy]-2-[(triphenylmethoxy)methyl]butyl]- (CA INDEX NAME)



RN 904907-37-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(acetyloxy)methyl]-4-[(1,1-dimethylethyl)dimethylsilyloxy]butyl]- (CA INDEX NAME)

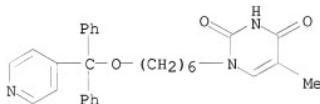


RN 904907-39-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(acetyloxy)methyl]-4-[(triphenylmethoxy)methyl]butyl]- (CA INDEX NAME)



OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)  
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

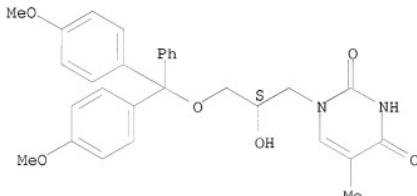
L11 ANSWER 17 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2006:391440 CAPLUS  
 DN 145:78652  
 TI Bromovinyl-deoxyuridine: A selective substrate for mitochondrial thymidine kinase in cell extracts  
 AU Franzolin, Elisa; Rampazzo, Chiara; Perez-Perez, Maria-Jesus; Hernandez, Ana-Isabel; Balzarini, Jan; Bianchi, Vera  
 CS Department of Biology, University of Padova, Padua, 35131, Italy  
 SO Biochemical and Biophysical Research Communications (2006), 344(1), 30-36  
 CODEN: BBRCA9; ISSN: 0006-291X  
 PB Elsevier  
 DT Journal  
 LA English  
 AB Cellular models of mitochondrial thymidine kinase (TK2) deficiency require a reliable method to measure TK2 activity in whole cell exts. containing two interfering deoxyribonucleoside kinases, thymidine kinase 1 (TK1) and deoxycytidine kinase. We tested the value of the thymidine analog (E)-5-(2-bromovinyl)-2'-deoxyuridine (BVDU) as a TK2-specific substrate. With exts. of OSTTK1- cells containing TK2 as the only thymidine kinase and a highly specific TK2 inhibitor we established conditions to detect the low TK2 activity commonly present in cells. With exts. of TK1-proficient osteosarcoma cells and normal human fibroblasts we showed that BVDU, but not 1-( $\beta$ -D-arabinofuranosyl)thymine (Ara-T), discriminates TK2 activity even in the presence of 100-fold excess TK1. A comparison with current procedures based on TK2 inhibition demonstrated the better performance of the new TK2 assay. When cultured human fibroblasts passed from proliferation to quiescence TK2 activity increased by 3-fold, stressing the importance of TK2 function in the absence of TK1.  
 IT 892392-58-4, KIN 109  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitor; phosphorylation of substrate by thymidine kinase)  
 RN 892392-58-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-(diphenyl-4-pyridinylmethoxy)hexyl]-5-methyl- (CA INDEX NAME)



OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)  
 RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

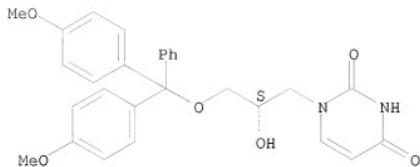
L11 ANSWER 18 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2006:220103 CAPLUS  
 DN 144:450868  
 TI Synthesis of glycol nucleic acids  
 AU Zhang, Lilu; Peritz, Adam E.; Carroll, Patrick J.; Meggers, Eric  
 CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA,  
 19104, USA  
 SO *Synthesis* (2006), (4), 645-653  
 CODEN: SYNTEF; ISSN: 0039-7881  
 PB Georg Thieme Verlag  
 DT Journal  
 LA English  
 OS CASREACT 144:450868  
 AB Starting from glycidol, the synthesis of dimethoxytritylated glycol nucleoside phosphoramidites of adenine (A), thymine (T), uracil (U), guanine (G), and cytosine (C) is reported. These phosphoramidites are the building blocks for the automated solid phase synthesis of glycol nucleic acids (GNA) oligonucleotides and it is demonstrated that derived GNA duplexes with completely acyclic backbones considerably exceed the thermal stabilities of analogous DNA duplexes.  
 IT 168332-12-5P 494784-12-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (solid phase synthesis and GNA duplex thermal stability of glycol nucleic acids)  
 RN 168332-12-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



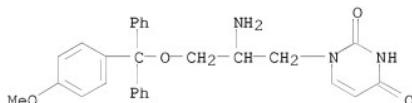
RN 494784-12-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



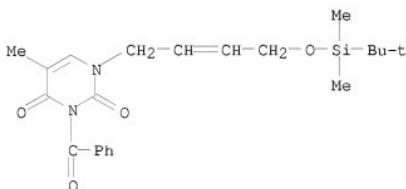
OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)  
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2006:186166 CAPLUS  
 DN 146:142935  
 TI Synthesis of aminopropyl phosphonate nucleosides with purine and pyrimidine bases  
 AU Zhou, Ding; Lagoja, Irene M.; Van Aerschot, Arthur; Herrewijn, Piet  
 CS Laboratory of Medicinal Chemistry, Rega Institute, Louvain, B-3000, Belg.  
 SO Collection of Czechoslovak Chemical Communications (2006), 71(1), 15-34  
 CODEN: CCCCAK; ISSN: 0010-0765  
 PB Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic  
 DT Journal  
 LA English  
 OS CASREACT 146:142935  
 AB The synthesis and antiviral evaluation of new acyclic phosphonate nucleosides, e.g. I, II and III, related to HPMPC (Cidofovir) has been described. These aminopropyl phosphonate nucleosides have an amino function within either the acyclic chain or as substituent. Both purine and pyrimidine nucleotide analogs have been synthesized. In contrast to HPMPC the oxygen analog of II, only a weak antiherpes virus activity could be demonstrated for II and its guanine analog.  
 IT 918869-00-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and antiviral activity of aminopropyl acyclic nucleotide phosphonates via phosphorylation and Mitsunobu reaction)  
 RN 918869-00-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-amino-3-[(4-methoxyphenyl)diphenylmethoxy]propyl]- (CA INDEX NAME)



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)  
 RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

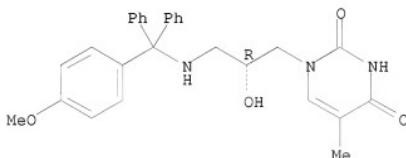
L11 ANSWER 20 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2006:135823 CAPLUS  
 DN 144:391288  
 TI Regioselective and enantiospecific rhodium-catalyzed allylic amination with thymine: synthesis of a new conformationally rigid nucleoside  
 AU Evans, P. Andrew; Lai, Kwong Wah; Zhang, Hai-Ren; Huffman, John C.  
 CS Department of Chemistry, Indiana University, Bloomington, IN 47405, USA  
 SO Chemical Communications (Cambridge, United Kingdom) (2006), (8), 844-846  
 CODEN: CHCOFS; ISSN: 1359-7345  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 144:391288  
 AB The regioselective and enantiospecific rhodium-catalyzed allylic amination of secondary allylic carbonates with N3-benzoyl thymine in conjunction with a stereoselective free radical cyclization provides a convenient method for the construction of a new conformationally rigid nucleoside, e.g. I.  
 IT 882659-64-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (regioselective and enantiospecific rhodium-catalyzed allylic amination with thymine synthesis of conformationally rigid nucleoside)  
 RN 882659-64-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[4-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-buten-1-yl]-5-methyl- (CA INDEX NAME)



OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)  
 RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

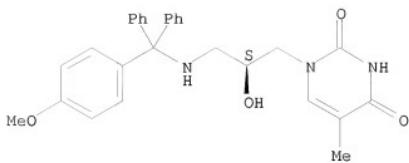
L11 ANSWER 21 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:1327007 CAPLUS  
 DN 146:100965  
 TI Synthesis and properties of aminopropyl nucleic acids  
 AU Zhou, Ding; Lagoja, Irene M.; RozenSKI, Jef; Busson, Roger; Van Aerschot, Arthur; Herdewijn, Piet  
 CS Laboratory of Medicinal Chemistry, Rega Institute for Medical Research, K.U. Leuven Louvain, 3000, Belg.  
 SO ChemBioChem (2005), 6(12), 2298-2304  
 CODEN: CBCOFX; ISSN: 1439-4227  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 OS CASREACT 146:100965  
 AB Oligonucleotides that contain up to three aminopropyl nucleoside analogs have been synthesized. Dimers of aminopropyl adenine (R)- and (S)-I, and dimers of aminopropyl thymidine (R)- and (S)-II, were prepared and used as building blocks by applying phosphoramidite chemical. Both R and S isomers of the aminopropyl nucleosides were used. This incorporation led to a reduction of thermal stability of double-stranded DNA. Furthermore, the (R)-adenine analog, which yielded (S)-APNA, can be considered as a candidate for universal base pairing.  
 IT 917359-18-3P 917359-24-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and thermal stability of aminopropyl oligonucleotides and nucleic acids)  
 RN 917359-18-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2R)-2-hydroxy-3-[[[(4-methoxyphenyl)diphenylmethyl]amino]propyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.



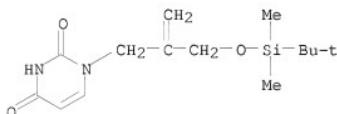
RN 917359-24-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-2-hydroxy-3-[[[(4-methoxyphenyl)diphenylmethyl]amino]propyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

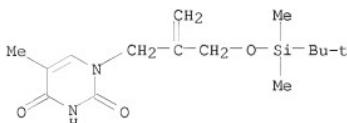


OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)  
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:1319229 CAPLUS  
 DN 145:211282  
 TI Synthesis and antiviral evaluation of novel exo-methylene acyclic nucleosides and phosphonic acid nucleosides  
 AU Kim, Aihong; Hong, Joon Hee  
 CS College of Pharmacy, Chosun University, Kwangju, S. Korea  
 SO Archiv der Pharmazie (Weinheim, Germany) (2005) 338(11), 528-533  
 CODEN: ARPMAS; ISSN: 0365-6233  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 OS CASREACT 145:211282  
 AB This paper describes a very simple synthesis route of novel acyclic nucleosides and phosphonic acid nucleosides, e.g. I. The condensation of the mesylates II with the natural nucleosidic bases (A, C, U, T) under nucleophilic substitution ( $K_2CO_3$ , 18-crown-6, DMF) and deprotection afforded the target nucleosides and phosphonic acid nucleosides. In addition, these compds. were evaluated for their antiviral properties against various viruses. Uracil derivative 24 shows significant anti-HCMV activity ( $EC_{50} = 10.24 \mu M$ ).  
 IT 905306-22-1P 905306-23-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and antiviral evaluation of novel exomethylene acyclic nucleosides and phosphonic acid nucleosides)  
 RN 905306-22-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2-propen-1-yl - (CA INDEX NAME)



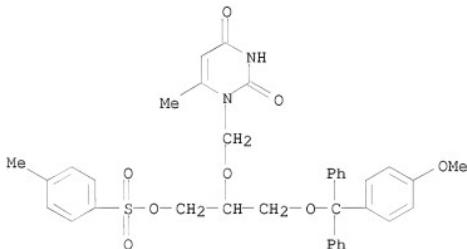
RN 905306-23-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2-propen-1-yl-5-methyl- (CA INDEX NAME)



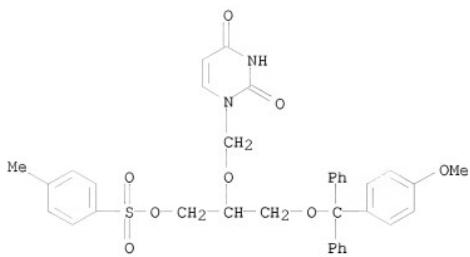
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT



L11 ANSWER 23 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:1316207 CAPLUS  
 DN 146:82126  
 TI Synthesis of 18F-labeled acyclic purine and pyrimidine nucleosides intended for monitoring gene expression  
 AU Grote, M.; Noll, B.; Noll, St.  
 CS Forschungszentrum Rossendorf e.V., Institut fuer Bioanorganische und Radiopharmazeutische Chemie, Dresden, 01314, Germany  
 SO Radiochimica Acta (2005), 93(9-10), 585-588  
 CODEN: RAACAP; ISSN: 0033-8230  
 PB Oldenbourg Wissenschaftsverlag GmbH  
 DT Journal  
 LA English  
 OS CASREACT 146:82126  
 AB Non-invasive imaging of genes which are introduced into cells is a useful method for gene therapy monitoring. The labeling of acyclic purine and pyrimidine nucleoside derivs., e.g. I and II, with fluorine-18 required for the HSV-1 tk imaging approach with positron emission tomog. (PET) is described. The methoxytritylated and tosylated precursors were radiolabeled using a K[18F]F/kryptofix 2.2.2 complex, followed by removal of the protecting groups under acidic conditions and HPLC purification. The radiochem. yields of the 18F-tracers amount to 5%-15% (decay corrected) after a synthesis time of 85-95 min; the radiochem. purity was > 98% with an average specific activity of 19 GBq/ $\mu$ mol at the end of synthesis.  
 IT 718633-27-3 917084-43-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of 18F-labeled acyclic purine and pyrimidine nucleosides via nucleophilic fluorination and demethoxytritylation)  
 RN 718633-27-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[1-[[({4-methoxyphenyl)diphenylmethoxy]methyl]-2-[[({4-methylphenyl)sulfonyl]oxy]ethoxy]methyl]-6-methyl- (CA INDEX NAME)



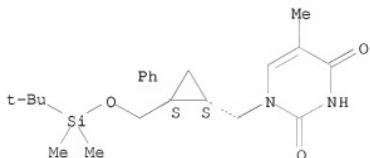
RN 917084-43-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[1-[[({4-methoxyphenyl)diphenylmethoxy]methyl]-2-[[({4-methylphenyl)sulfonyl]oxy]ethoxy]methyl]- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

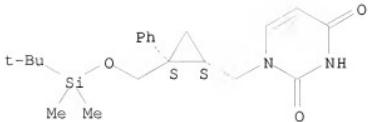
L11 ANSWER 24 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:1032043 CAPLUS  
 DN 145:8369  
 TI Synthesis and anti-HIV activity of novel phenyl branched cyclopropyl nucleosides  
 AU Wu, Ying; Hong, Joon Hee  
 CS College of Pharmacy, Chosun University, Kwangju, 501-759, S. Korea  
 SO Farmaco (2005), 60(9), 739-744  
 CODEN: FRMCE8; ISSN: 0014-827X  
 PB Editions Scientifiques et Medicales Elsevier  
 DT Journal  
 LA English  
 OS CASREACT 145:8369  
 AB Novel Ph branched cyclopropyl nucleoside analogs were designed and synthesized as potential antiviral agents. Cyclopropanation was performed via classical Simmons-Smith reaction using Zn(Et)2 and CH2I2. Coupling of the mesylates with natural bases (A,C,T,U) and desilylation afforded a series of novel cyclopropyl nucleosides. The synthesized compds. were evaluated for their antiviral and antitumor activity against various viruses such as HIV, HSV-1, HSV-2 and HCMV.  
 IT 888229-15-0P 888229-16-1P 888229-19-4P  
 888229-20-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis Ph branched cyclopropyl nucleosides and their antiviral and antitumor activity against HIV, HSV-1, HSV-2 and HCMV)  
 RN 888229-15-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2R)-2-[([(1,1-dimethylethyl)dimethylsilyl]oxy)methyl]-2-phenylcyclopropyl)methyl]-5-methyl-, rel- (CA INDEX NAME)

Relative stereochemistry.



RN 888229-16-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2R)-2-[([(1,1-dimethylethyl)dimethylsilyl]oxy)methyl]-2-phenylcyclopropyl)methyl]-, rel- (CA INDEX NAME)

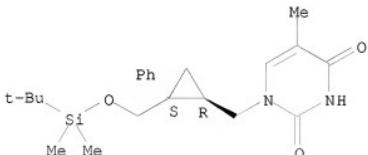
Relative stereochemistry.



RN 888229-19-4 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2S)-2-[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2-phenylcyclopropylmethyl-, 5-methyl-, rel- (CA INDEX NAME)

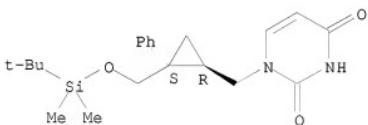
Relative stereochemistry.



RN 888229-20-7 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2S)-2-[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2-phenylcyclopropylmethyl-, rel- (CA INDEX NAME)

Relative stereochemistry.



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:638741 CAPLUS  
 DN 143:153391  
 TI Preparation of pyrimidinediones as deoxyuridine triphosphate nucleotidohydrolase (dUTPase) inhibitors for treatment of parasitic infections.  
 IN Gilbert, Ian; Nguyen, Corinne; Ruda, Gian Filippo; Schhipani, Alessandro; Kasinathan, Ganasan; Johansson, Nils-Gunnar; Pacanowska, Dolores Gonzales  
 PA Medivir AB, Swed.  
 SO PCT Int. Appl., '76 pp. Applicant's  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 2

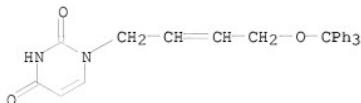
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005065689	A1	20050721	WO 2005-GB50002	20050106
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1701727	A1	20060920	EP 2005-702147	20050106
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, GE, EE, MU, PL, SK, IS				
PRAI	US 20080312183	A1	20081218	US 2006-585283	20061002
GB 2004-290	A	20040108			
WO 2005-GB50002	W	20050106			
OS	CASREACT 143:153391; MARPAT 143:153391				
AB	Title compds. [I; A = C0-3 alkylene; R1 = H, (substituted) alkyl, alkenyl, alkynyl, (hetero)cyclol; D = NHCO, O, CO, CH:CH, C.tplbond.C, NR5; R4 = H, halo, cyano, amino, NO2, CO2H, OH, carbamoyl, O, alkyl, haloalkyl, alkanoyl, alkanoyloxy, carboxymethyl, etc.; R5 = H, alkyl, alkanoyl; E = Si, C; R6, R7, R8 = alkyl, alkenyl, alkynyl, (unsatd.) mono-, bi-, tricyclic ring; G = O, S, CHR10, CO; J = CH2, or when G = CHR10 may also = O, NH; R10 = H, F, Me, CH2NH2, CH2OH, OH, ether, ester, or amide thereof; R11 = H, F, Me, CH2NH2, CH2OH, CH(OH)Me, CH(NH2)Me; R10R11 = olefinic bond, CH2 defining a cis or trans cyclopropyl group], were prepared Thus, 1-(4-hydroxybutyl)uracil was stirred with trityl chloride and DMAP in pyridine at 60° for 64 h to give 86% 1-(4-trityloxybutyl)uracil. The latter inhibited Plasmodium falciparum dUTPase with Ki = 1.62 μM, with 617-fold selectivity over human dUTPase.				
IT	860266-79-1P	860266-80-4P	860266-81-5P		
	860266-83-7P	860266-84-8P	860266-85-9P		
	860266-86-0P	860266-87-1P	860266-88-2P		
	860266-89-3P	860266-90-6P	860266-91-7P		
	860266-92-8P	860266-93-9P	860266-94-0P		
	860266-95-1P	860266-96-2P	860266-97-3P		

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrimidinediones as deoxyuridine triphosphate nucleotidohydrolase inhibitors for treatment of parasitic infections)

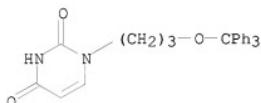
RN 860266-79-1 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)



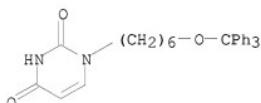
RN 860266-80-4 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(triphenylmethoxy)propyl]- (CA INDEX NAME)



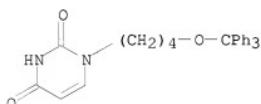
RN 860266-81-5 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-(triphenylmethoxy)hexyl]- (CA INDEX NAME)



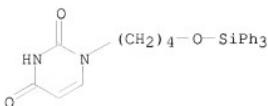
RN 860266-83-7 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-(triphenylmethoxy)butyl]- (CA INDEX NAME)

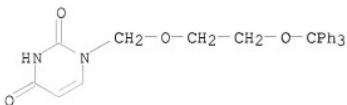


RN 860266-84-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[(triphenylsilyl)oxy]butyl]- (CA INDEX NAME)

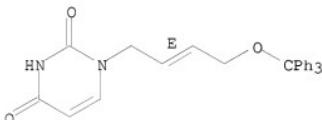


RN 860266-85-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-(triphenylmethoxy)ethoxy)methyl]- (CA INDEX NAME)

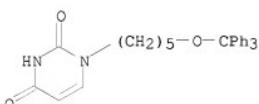


RN 860266-86-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2E)-4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)

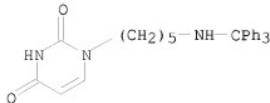
Double bond geometry as shown.



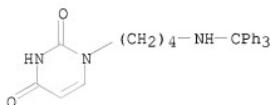
RN 860266-87-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(5-(triphenylmethoxy)pentyl)-] (CA INDEX NAME)



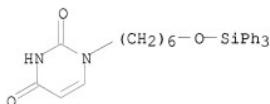
RN 860266-88-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(5-[(triphenylmethyl)amino]pentyl)-] (CA INDEX NAME)



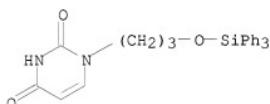
RN 860266-89-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)



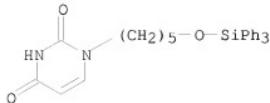
RN 860266-90-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-[(triphenylsilyl)oxy]hexyl]- (CA INDEX NAME)



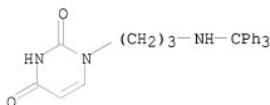
RN 860266-91-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(triphenylsilyl)oxy]propyl]- (CA INDEX NAME)



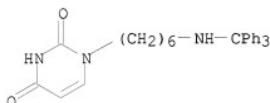
RN 860266-92-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-[(triphenylsilyl)oxy]pentyl]- (CA INDEX NAME)



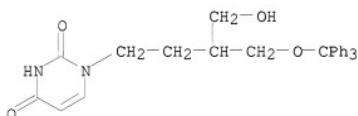
RN 860266-93-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(triphenylmethyl)amino]propyl]- (CA INDEX NAME)



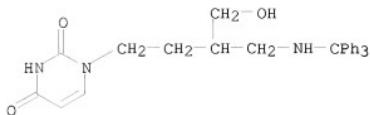
RN 860266-94-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[6-[(triphenylmethyl)amino]hexyl]- (CA INDEX NAME)



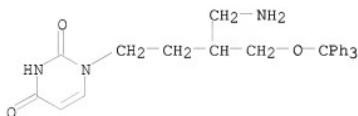
RN 860266-95-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(hydroxymethyl)-4-[(triphenylmethoxy)butyl]- (CA INDEX NAME)



RN 860266-96-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(hydroxymethyl)-4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)

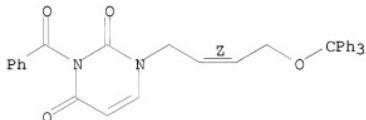


RN 860266-97-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(aminomethyl)-4-(triphenylmethoxy)butyl]-  
 (CA INDEX NAME)



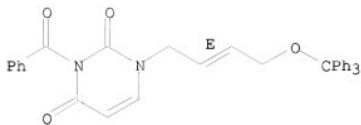
IT 860266-98-4P 860266-99-5P 860267-00-1P  
 860267-01-2P 860267-03-4P 860267-04-5P  
 860267-09-0P 860267-11-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of pyrimidinediones as deoxyuridine triphosphate  
 nucleotidohydrolase inhibitors for treatment of parasitic infections)  
 RN 860266-98-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[(2Z)-4-(triphenylmethoxy)-2-butenyl]-  
 (CA INDEX NAME)

Double bond geometry as shown.

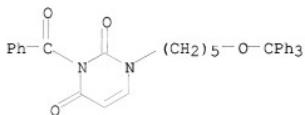


RN 860266-99-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[(2E)-4-(triphenylmethoxy)-2-butenyl]-  
 (CA INDEX NAME)

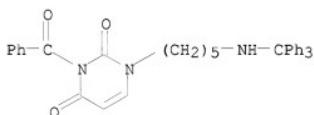
Double bond geometry as shown.



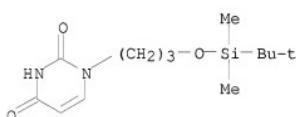
RN 860267-00-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[5-(triphenylmethoxy)pentyl]- (CA INDEX NAME)



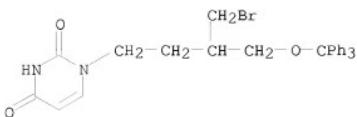
RN 860267-01-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[5-[(triphenylmethyl)amino]pentyl]- (CA INDEX NAME)



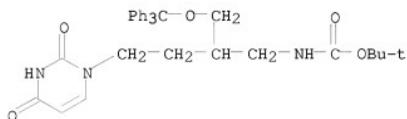
RN 860267-03-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(1,1-dimethylethyl)dimethylsilyloxy]propyl]- (CA INDEX NAME)



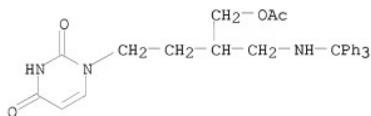
RN 860267-04-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-(bromomethyl)-4-(triphenylmethoxy)butyl]- (CA INDEX NAME)



RN 860267-09-0 CAPLUS  
 CN Carbanic acid, [4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(triphenylmethoxy)methyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 860267-11-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(acetyloxy)methyl]-4-[(triphenylmethyl)amino]butyl]- (CA INDEX NAME)

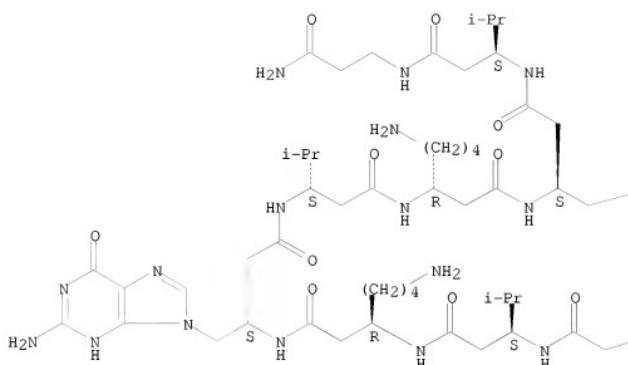


RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

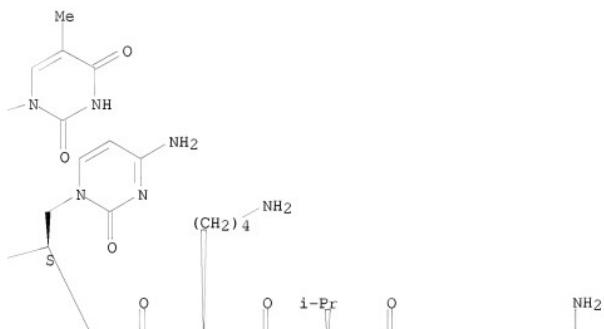
L11 ANSWER 26 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:489071 CAPLUS  
 DN 143:153688  
 TI Three-dimensional organization of helices: design principles for nucleobase-functionalized  $\beta$ -peptides  
 AU Chakraborty, Pradip; Diederichsen, Ulf  
 CS Institut fuer Organische und Biomolekulare Chemie, Georg August Universitaet Goettingen, Goettingen, 37077, Germany  
 SO Chemistry--A European Journal (2005), 11(11), 3207-3216  
 CODEN: CEUJED; ISSN: 0947-6539  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 OS CASREACT 143:153688  
 AB The construction and mol. recognition of various three-dimensional biomimetic structures is based on the predictable de novo design of artificial mols. In this regard  $\beta$ -peptides are especially interesting, since stable secondary structures are obtained already with short sequences; one of them is the 14-helix in which every third residue has the same orientation. The covalent functionalization of every third 14-helix side chain with nucleobases was used for a reversible organization of two helixes based on nucleobase pairing. A series of  $\beta$ -peptides with various nucleobase sequences was synthesized and the stability of double strand formation was investigated. As few as four nucleobases are sufficient for considerable duplex stability. The stability of base pairing was examined by temperature-dependent UV spectroscopy and the formation of the 14-helix was confirmed by CD spectroscopy. The preferred strand orientation of complementary-nucleobase-modified  $\beta$ -peptide helixes was investigated as well as the influence of helix content on the duplex stability. The preorganization of a 14-helix in regard to double-strand recognition was tuned by the sequential order of polar  $\beta$ -amino acids or by the amount of 2-aminocyclohexanecarboxylic acid units incorporated, which are known to facilitate 14-helix formation, resp.  
 IT 860458-18-0P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of nucleobase-functionalized  $\beta$ -peptides and effect of helix content on duplex stability)  
 RN 860458-18-0 CAPLUS  
 CN 9H-Purine-9-butanamide, 2-amino-N-[(7S,11S,15R,19S)-1-amino-15-(4-aminobutyl)-11-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-7,19-bis(1-methylethyl)-1,5,9,13,17-pentaoxo-4,8,12,16-tetraazanonadec-19-yl]- $\beta$ -[(3R,7S,11S,15R,19S,23S,27R)-27,31-diamino-3,15-bis(4-aminobutyl)-11-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-23-[(6-amino-9H-purin-9-yl)methyl]-7,19-bis(1-methylethyl)-1,5,9,13,17,21,25-heptaoxo-4,8,12,16,20,24-hexaazahentriaccont-1-yl]amino]-1,6-dihydro-6-oxo-, ( $\beta$ S)- (CA INDEX NAME)

Absolute stereochemistry.

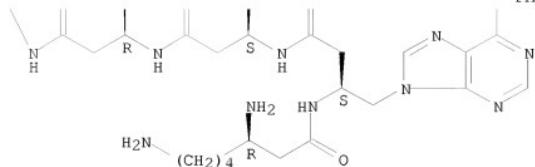
PAGE 1-A



PAGE 1-B

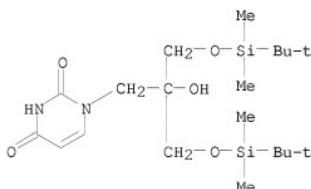


PAGE 2-B



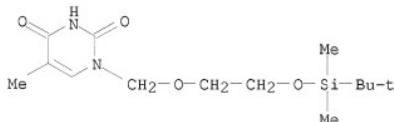
OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)  
RE.CNT 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 27 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:411671 CAPLUS  
 DN 143:115746  
 TI Cyclization reactions of 1-[3'-hydroxy-2'-(hydroxymethyl)prop-1'-enyl]pyrimidine nucleobases: intramolecular Michael additions to the C(5):C(6) bonds and intramolecular dehydration  
 AU Dahl, Otto; Jensen, Jacob; Petersen, Michael Axman; Henriksen, Ulla  
 CS Department of Chemistry The H. C. Ørsted Institute, University of Copenhagen, Copenhagen, DK-2100, Denmark  
 SO Organic & Biomolecular Chemistry (2005), 3(10), 1964-1970  
 CODEN: OBCRAK; ISSN: 1477-0520  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 143:115746  
 AB The tendency of a series of acyclic nucleoside analogs, e.g. I, to undergo intramol. cyclization reactions was investigated. All compds., when treated with NaOD, were in equilibrium with the bicyclic compds., e.g. II, arising from Michael addition of a hydroxy group to the C(5):C(6) bonds. Derivs. of 2,4-pyrimidinedione, e.g. I, had the highest tendency to undergo intramol. Michael addition when treated with triethylamine, whereas the cyclization of 4-amino-2-pyridone derivs. proceeded best with acid. The exocyclic double bond of I was essential for the cyclization to occur. Commonly used N-protecting groups as the benzoyl- and the dibutylaminomethylene group enhanced cyclization.  
 IT 857861-38-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (Cyclization reactions of 1-[3'-hydroxy-2'-(hydroxymethyl)prop-1'-enyl]pyrimidine nucleobases and intramol. Michael addns. to the C(5):C(6) bonds and intramol. dehydration)  
 RN 857861-38-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[[{(1,1-dimethylethyl)dimethylsilyl]oxy}-2-[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2-hydroxypropyl- (CA INDEX NAME)



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 28 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:359585 CAPLUS  
 DN 143:43727  
 TI Synthesis of 1-[(2-hydroxyethoxy)methyl]-6-(5,6,7,8-tetrahydronaphthylmethyl)thymine as novel inhibitor against drug-resistant HIV mutants  
 AU Meng, Ge; Kuang, Yun-Yan; Ji, Lei; Chen, Fen-Er  
 CS Department of Chemistry, Fudan University, Shanghai, Peop. Rep. China  
 SO Synthetic Communications (2005), 35(8), 1095-1102  
 CODEN: SYNCBV; ISSN: 0039-7911  
 PB Taylor & Francis, Inc.  
 DT Journal  
 LA English  
 OS CASREACT 143:43727  
 AB Synthesis of two new 1-[(2-hydroxyethoxy)methyl]-6-(5,6,7,8-tetrahydronaphthylmethyl)thymine derivs. as potent inhibitors against a mutant type of HIV, starting from thymine, is described. In the preparation of the corresponding 1-[(2-hydroxyethoxy)methyl]-6-(5,6,7,8-tetrahydronaphthylmethyl)thymine derivs. a three-step reaction via deprotection, hydrogenolysis, and hydrogenation was carried out in a one-pot procedure. The pharmacol. activity of the target compds. thus prepared will be reported elsewhere.  
 IT 121749-98-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of [(hydroxyethoxy)methyl](tetrahydronaphthylmethyl)thymine derivs. using hydroxyethyl thymine derivative as synthetic intermediate)  
 RN 121749-98-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[[((1,1-dimethyl ethyl)dimethylsilyl)oxy]ethoxy]methyl]-5-methyl- (CA INDEX NAME)

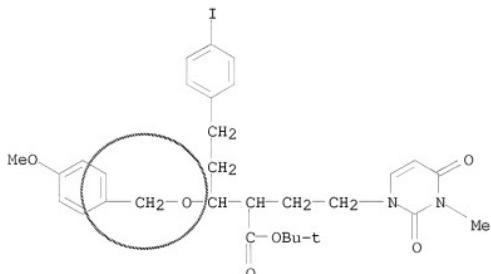


RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 29 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:260025 CAPLUS  
 DN 142:336245  
 TI Preparation of biphenylpentanoic acid derivatives as matrix  
 metalloproteinase inhibitors  
 IN Gaines, Simon; Holmes, Ian Peter; Martin, Stephen Lewis; Watson, Stephen  
 Paul  
 PA Glaxo Group Limited, UK  
 SO PCT Int. Appl., 41 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005026120	A1	20050324	WO 2004-EP10319	20040910
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004272280	A1	20050324	AU 2004-272280	20040910
	CA 2538315	A1	20050324	CA 2004-2538315	20040910
EP	1663970	A1	20060607	EP 2004-765231	20040910
EP	1663970	B1	20081105		
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CN	1849306	A	20061018	CN 2004-80026229	20040910
BR	2004013791	A	20061107	BR 2004-13791	20040910
JP	2007505081	T	20070308	JP 2006-525794	20040910
SG	145685	A1	20080929	SG 2008-5432	20040910
AT	413384	T	20081115	AT 2004-765231	20040910
NZ	545211	A	20090131	NZ 2004-545211	20040910
ES	2314436	T3	20090316	ES 2004-765231	20040910
EP	2042488	A1	20090401	EP 2008-163972	20040910
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LT, LV				
NO	2006000540	A	20060404	NO 2006-540	20060202
IN	2006KN00295	A	20070608	IN 2006-KN295	20060210
MX	2006002458	A	20060620	MX 2006-2458	20060302
ZA	2006002070	A	20070530	ZA 2006-2070	20060310
KR	2006120648	A	20061127	KR 2006-705114	20060313
US	20060293353	A1	20061228	US 2006-571443	20060313
HK	1092141	A1	20090529	HK 2006-112572	20061115
IN	2008KN02511	A	20090130	IN 2008-KN2511	20080620
US	20090082377	A1	20090326	US 2008-266767	20081107
PRAI	GB 2003-21538	A	20030913		
	EP 2004-765231	A3	20040910		
	WO 2004-EP10319	W	20040910		
	IN 2006-KN295	A3	20060210		
	US 2006-571443	A1	20060313		

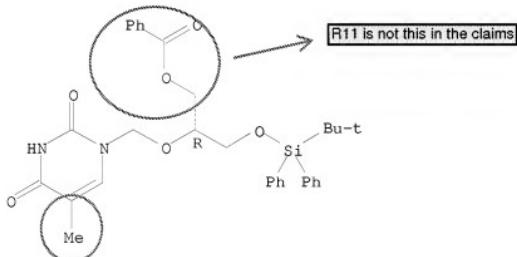
- OS CASREACT 142:336245; MARPAT 142:336245
- AB Title compds. represented by the formula I [wherein A = a bond or  $(\text{CH}:\text{CH})\text{alkyl}$ ; B = a bond, O, S,  $\text{SO}_2$ , CO, etc.; D = a bond or alkyl; E = (un)substituted (hetero)aryl; Q = (un)substituted (hetero)aryl; X = O, S, SO,  $\text{SO}_2$ , CO, etc.; Y = SO,  $\text{SO}_2$ , CS, etc.; R, R1 = independently H or alkyl(aryl); R2 = carboxy, amido, thiol, etc.; R3 = H or alkyl(aryl); R4 = (un)substituted (hetero)aryl; Z = a bond,  $\text{CH}_2$ , amino, etc., or R4Z = (un)substituted fused tricyclic group; and physiol. functional derivs. thereof] were prepared as matrix metalloproteinase (MMP) inhibitors. For example, II was given in a multi-step synthesis starting from biphenyl-4-ylmethanol. I showed inhibition of MMP-12 with IC<sub>50</sub> values of below 100  $\mu\text{M}$ . Thus, I and their pharmaceutical compns. are useful as MMP inhibitors for the treatment of autoimmune disorder or inflammatory condition (no data).
- IT 848407-57-8P, 1,1-Dimethylethyl  
 5-(4-iodophenyl)-2-[2-(3-methyl-2,4-dioxo-3,4-dihydro-1(2H)-pyrimidinyl)ethyl]-3-[[[4-(methoxyphenyl)methyl]oxyl]pentanoate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of biphenylpentanoic acid derivs. as matrix metalloproteinase inhibitors)
- RN 848407-57-8 CAPLUS
- CN 1(2H)-Pyrimidinebutanoic acid, 3,4-dihydro- $\alpha$ -[3-(4-iodophenyl)-1-[(4-methoxyphenyl)methoxyl]propyl]-3-methyl-2,4-dioxo-, 1,1-dimethylethyl ester  
 (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 30 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:200927 CAPLUS  
 DN 143:188490  
 TI Toward non-natural polymers that fold and function  
 AU Park, Jeong-II; Roth, Shoshannah L.; McQuade, D. Tyler  
 CS Department of Chemistry and Chemical Biology, Cornell University, Ithaca,  
 NY, 14853-1301, USA  
 SO Polymer Preprints (American Chemical Society, Division of Polymer  
 Chemistry) (2005), 46(1), 180  
 CODEN: ACPPAY; ISSN: 0032-3934  
 PB American Chemical Society, Division of Polymer Chemistry  
 DT Journal; (computer optical disk)  
 LA English  
 AB Oligonucleotides constructed from acyclic nucleotides have the potential  
 to fold and function like their natural counterparts. The advantages of  
 using non-natural backbones are greater stability toward hydrolytic  
 enzymes and the potential of incorporating non-natural monomers with  
 catalytic function.  
 IT 861205-26-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (acyclic nucleotide DNA analogs interactions)  
 RN 861205-26-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R)-2-(benzoyloxy)-1-[[[[(1,1-  
 dimethylethyl)diphenylsilyl]oxy]methyl]ethoxy]methyl]-5-methyl- (CA INDEX  
 NAME)

Absolute stereochemistry.

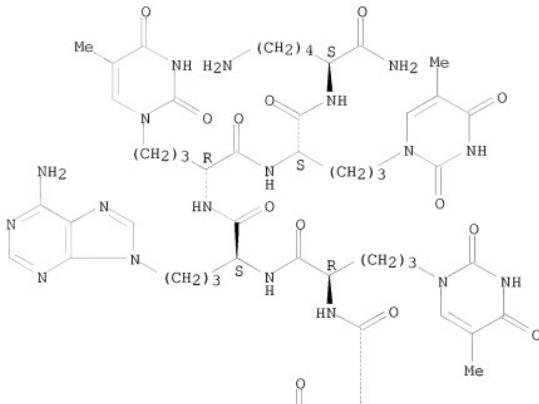


RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

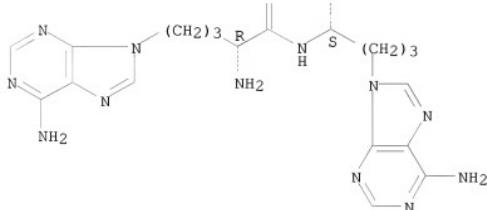
L11 ANSWER 31 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:198994 CAPLUS  
 DN 142:430511  
 TI Side chain homologation of alanyl peptide nucleic acids: pairing selectivity and stacking  
 AU Diederichsen, Ulf; Weicherding, Daniel; Diezemann, Nicola  
 CS Institut fuer Organische und Biomolekulare Chemie, Goettingen, D-37077, Germany  
 SO Organic & Biomolecular Chemistry (2005), 3(6), 1058-1066  
 CODEN: OECRAK; ISSN: 1477-0520  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 142:430511  
 AB Alanyl peptide nucleic acids (alanyl-PNAs) are oligomers based on a regular peptide backbone with alternating configuration of the amino acids. All side chains are modified by covalently linked nucleobases. Alanyl-PNAs form very rigid, well defined, and linear double strands based on hydrogen bonding of complementary strands, stacking, and solvation. Side chain homol. was examined by comparing a methylene linker (alanyl-PNA) with an ethylene linker (homovalyl-PNA), a trimethylene linker (norvalyl-PNA), and PNA sequences with mixed linker length between nucleobase and backbone. Side chain homol. in combination with a linear double strand topol. turned out to be valuable in order to selectively manipulate pairing selectivity (pairing mode) and base pair stacking.  
 IT 850742-43-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
     (side chain homologation as solid phase peptide synthesis of peptide nucleic acids and effect of hydrogen bonding, base stacking, and solvation on double strands formation)  
 RN 850742-43-7 CAPLUS  
 CN L-Lysinamide, 5-(6-amino-9H-purin-9-yl)-D-norvalyl-5-(6-amino-9H-purin-9-yl)-L-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-D-norvalyl-5-(6-amino-9H-purin-9-yl)-L-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-D-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-norvalyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



IT 850742-43-7DP, self-association dimer 850742-75-5P  
864629-43-6P

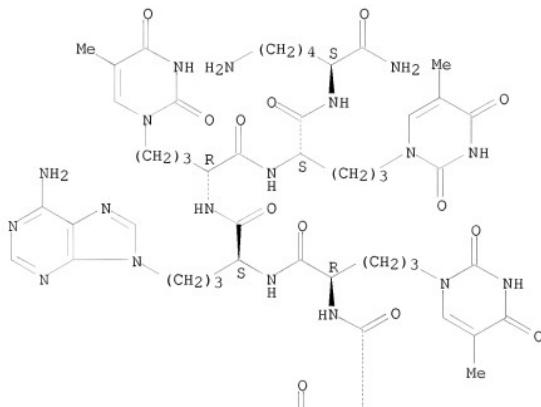
RL: SPN (Synthetic preparation); PREP (Preparation)  
(side chain homologation as solid phase peptide synthesis of peptide nucleic acids and effect of hydrogen bonding, base stacking, and solvation on double strands formation)

RN 850742-43-7 CAPLUS

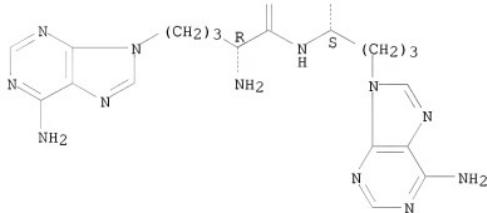
CN L-Lysinamide, 5-(6-amino-9H-purin-9-yl)-D-norvalyl-5-(6-amino-9H-purin-9-yl)-L-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-D-norvalyl-5-(6-amino-9H-purin-9-yl)-L-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-D-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-norvalyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 850742-75-5 CAPLUS

CN L-Lysinamide, 5-(6-amino-9H-purin-9-yl)-D-norvalyl-5-(6-amino-9H-purin-9-yl)-L-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-D-norvalyl-5-(6-amino-9H-purin-9-yl)-L-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-D-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-norvalyl-, compd. with 5-(6-amino-9H-purin-9-yl)-L-norvalyl-5-(6-amino-9H-purin-9-yl)-D-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-norvalyl-5-(6-amino-9H-purin-9-yl)-D-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-

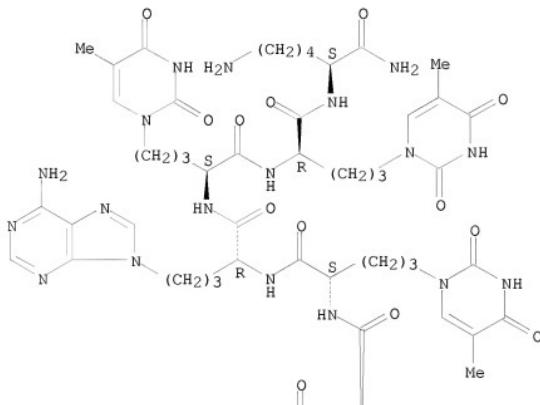
pyrimidinyl)-D-norvalyl-L-lysinamide (1:1) (9CI) (CA INDEX NAME)

CM 1

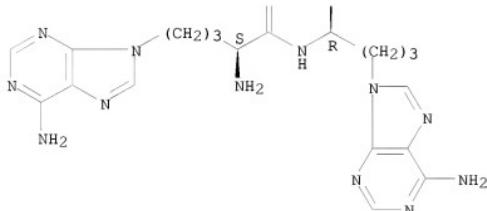
CRN 850742-74-4  
CMF C66 H90 N30 O13

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



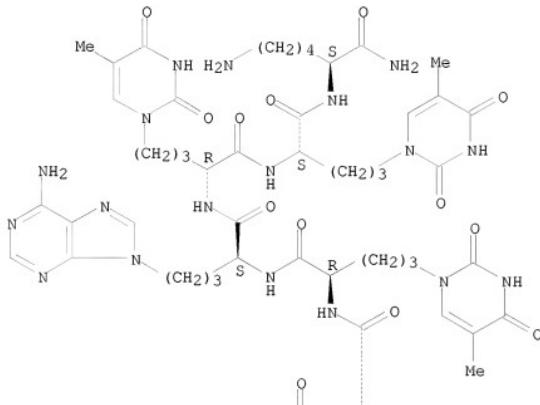
CM 2

CRN 850742-43-7

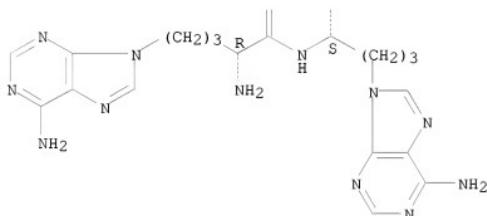
CMF C66 H90 N30 O13

Absolute stereochemistry.

PAGE 1-A



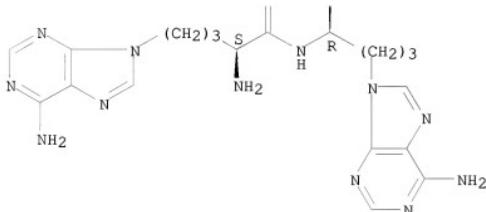
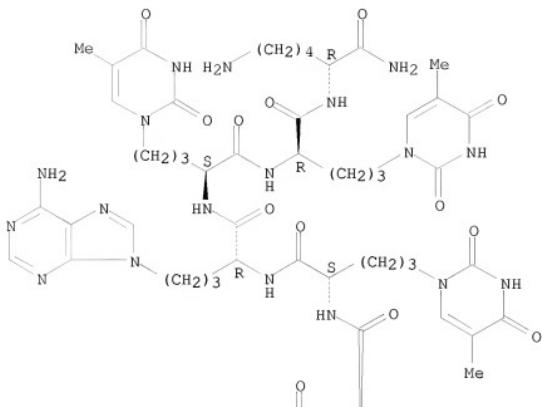
PAGE 2-A



RN 864629-43-6 CAPLUS

CN D-Lysinamide, 5-(6-amino-9H-purin-9-yl)-L-norvalyl-5-(6-amino-9H-purin-9-yl)-D-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-norvalyl-5-(6-amino-9H-purin-9-yl)-D-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-norvalyl-5-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-D-norvalyl- (9CI) (CA INDEX NAME)

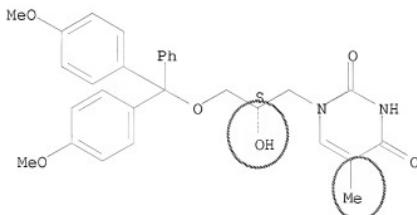
Absolute stereochemistry.



OSC.G 6        THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)  
 RE.CNT 35      THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 32 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:180165 CAPLUS  
 DN 142:443389  
 TI A Simple Glycol Nucleic Acid  
 AU Zhang, Lilu; Peritz, Adam; Meggers, Eric  
 CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA,  
 19104, USA  
 SO Journal of the American Chemical Society (2005), 127(12), 4174-4175  
 CODEN: JACSAT; ISSN: 0002-7863  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 142:443389  
 AB A glycol nucleic acid (GNA) with an acyclic propylene glycol phosphodiester backbone forms stable antiparallel duplexes following the Watson-Crick base pairing rules.  
 IT 168332-12-5P 168332-14-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and antiparallel duplex Watson-Crick base pairing properties of glycol nucleic acids with acyclic propylene glycol phosphodiester backbone)  
 RN 168332-12-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

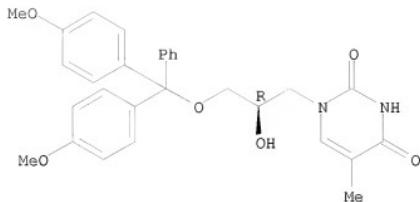
Absolute stereochemistry. Rotation (-).



compound claims do not contain this,  
 the reference does not teach any  
 utility

RN 168332-14-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2R)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

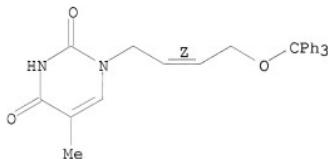
Absolute stereochemistry. Rotation (+).



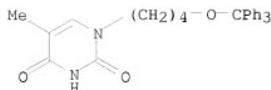
OSC.G 56 THERE ARE 56 CAPLUS RECORDS THAT CITE THIS RECORD (56 CITINGS)  
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 33 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2004:735304 CAPLUS  
 DN 141:273528  
 TI Synthesis and evaluation of thymine-derived carboxamides against mitochondrial thymidine kinase (TK-2) and related enzymes  
 AU Priego, Eva-Maria; Balzarini, Jan; Karlsson, Anna; Camarasa, Maria-Jose; Perez-Perez, Maria-Jesus  
 CS Instituto de Quimica Medica (CSIC), Madrid, E-28006, Spain  
 SO Bioorganic & Medicinal Chemistry (2004), 12(19), 5079-5090  
 CODEN: BMECEP; ISSN: 0968-0896  
 PB Elsevier Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 141:273528  
 AB Based on the structure of the authors previously identified mitochondrial thymidine kinase (TK-2) inhibitors, three series of thymine-derived carboxamides have been synthesized and tested against TK-2 and related enzymes. The methodol. employed has been a solution-phase parallel synthesis based on the coupling of three thymine-derived acids [4-(thymin-1-yl)butyric acid, [4-(thymin-1-yl)-butyrylamo]acetic acid and 6-(thymin-1-yl)hexanoic acid] with different com. available primary amines that carry cyano and/or Ph groups. The couplings were performed in good yields (from 60% to 90%), with the exception of those that incorporate the highly crowded triphenylmethylamine (e). From the new synthesized compds., the N-trityl-6-(thymin-1-yl)hexanamide was the most active TK-2 inhibitor ( $IC_{50} = 19 \mu M$ ).  
 IT 471256-44-7 471256-52-7 757964-30-0  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (synthesis and evaluation of thymine-derived carboxamides against mitochondrial thymidine kinase (TK-2) and related enzymes)  
 RN 471256-44-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[{(2Z)-4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)

Double bond geometry as shown.

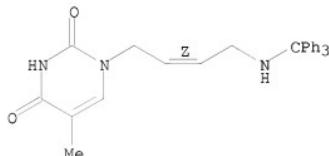


RN 471256-52-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[4-(triphenylmethoxy)butyl]- (CA INDEX NAME)

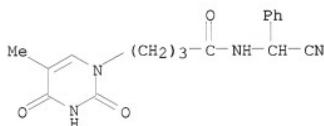


RN 757964-30-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[(2Z)-4-[(triphenylmethyl)amino]-2-buten-1-yl]- (CA INDEX NAME)

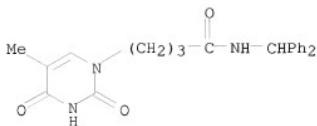
Double bond geometry as shown.



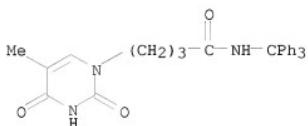
IT 757964-43-5P 757964-44-6P 757964-45-7P  
 757964-53-7P 757964-54-8P 757964-55-9P  
 757964-56-0P 757964-57-1P  
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation)  
 (synthesis and evaluation of thymine-derived carboxamides against  
 mitochondrial thymidine kinase (TK-2) and related enzymes)  
 RN 757964-43-5 CAPLUS  
 CN 1(2H)-Pyrimidinebutanamide, N-(cyanophenylmethyl)-3,4-dihydro-5-methyl-2,4-dioxo- (CA INDEX NAME)



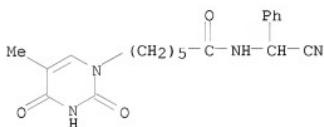
RN 757964-44-6 CAPLUS  
 CN 1(2H)-Pyrimidinebutanamide, N-(diphenylmethyl)-3,4-dihydro-5-methyl-2,4-dioxo- (CA INDEX NAME)



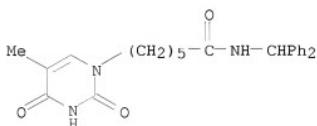
RN 757964-45-7 CAPLUS  
 CN 1(2H)-Pyrimidinebutanamide, 3,4-dihydro-5-methyl-2,4-dioxo-N-(triphenylmethyl)- (CA INDEX NAME)



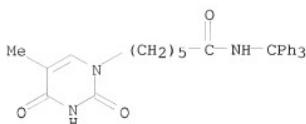
RN 757964-53-7 CAPLUS  
 CN 1(2H)-Pyrimidinhexanamide, N-(cyanophenylmethyl)-3,4-dihydro-5-methyl-2,4-dioxo- (CA INDEX NAME)



RN 757964-54-8 CAPLUS  
 CN 1(2H)-Pyrimidinhexanamide, N-(diphenylmethyl)-3,4-dihydro-5-methyl-2,4-dioxo- (CA INDEX NAME)

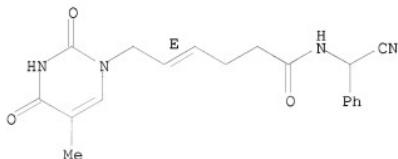


RN 757964-55-9 CAPLUS  
 CN 1(2H)-Pyrimidinehexanamide, 3,4-dihydro-5-methyl-2,4-dioxo-N-(triphenylmethyl)- (CA INDEX NAME)



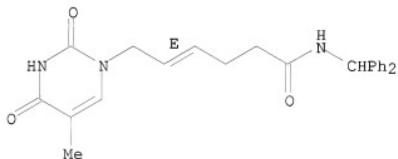
RN 757964-56-0 CAPLUS  
 CN 4-Hexenamide, N-(cyanophenylmethyl)-6-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-, (4E)- (CA INDEX NAME)

Double bond geometry as shown.



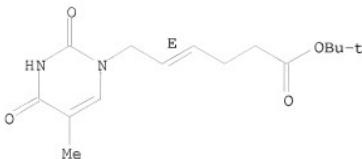
RN 757964-57-1 CAPLUS  
 CN 4-Hexenamide, 6-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-N-(diphenylmethyl)-, (4E)- (CA INDEX NAME)

Double bond geometry as shown.

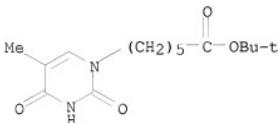


IT 757964-37-7P 757964-38-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and evaluation of thymine-derived carboxamides against mitochondrial thymidine kinase (TK-2) and related enzymes)  
 RN 757964-37-7 CAPLUS  
 CN 4-Hexenoic acid, 6-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-, 1,1-dimethylethyl ester, (4E)- (CA INDEX NAME)

Double bond geometry as shown.



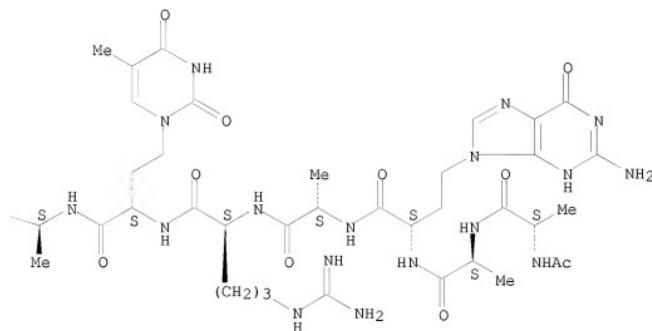
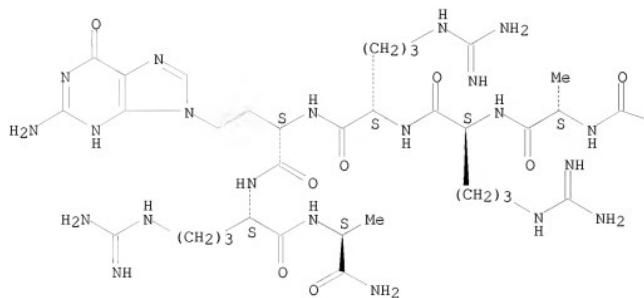
RN 757964-38-8 CAPLUS  
 CN 1(2H)-Pyrimidinehexanoic acid, 3,4-dihydro-5-methyl-2,4-dioxo-,  
 1,1-dimethylethyl ester (CA INDEX NAME)



OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)  
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 34 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2004:528258 CAPLUS  
 DN 141:256265  
 TI De Novo Design of Peptides with L- $\alpha$ -Nucleobase Amino Acids and Their Binding Properties to the P22 boxB RNA and Its Mutants  
 AU Miyanishi, Hideo; Takahashi, Tsuyoshi; Mihara, Hisakazu  
 CS Department of Bioengineering, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan  
 SO Bioconjugate Chemistry (2004), 15(4), 694-698  
 CODEN: BCCHE8; ISSN: 1043-1802  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB A method to design novel mols. that specifically recognize a structured RNA would be a promising tool for the development of drugs or probes targeting RNA. In this study, the de novo design of the  $\alpha$ -helical peptides having L- $\alpha$ -amino acids with nucleobases (nucleobase amino acids, NBAs) was carried out. Binding affinities of the peptides for a hairpin RNA derived from P22 phage were dependent on the types and positions of the NBA units they have. Some NBA peptides bound to the wild-type RNA or its mutant with high affinity and high specificity compared with the native P22 N peptide. These results indicate that the NBA units on the peptides interact with the RNA bases in a specific manner. It is demonstrated that the de novo design of peptides with the NBA units is an effective way to construct novel RNA-binding mols.  
 IT 756527-81-8 756527-85-2  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
 (nucleobase amino acid-containing peptide model;  $\alpha$ -helical peptide analogs with L- $\alpha$ -nucleobase amino acids design and binding properties to P22 boxB hairpin RNA and its mutants)  
 RN 756527-81-8 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-( $\alpha$ S)- $\alpha$ ,2-diamino-1,6-dihydro-6-oxo-9H-purine-9-butanoyl-L-alanyl-L-arginyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-alanyl-L-alanyl-L-arginyl-L-arginyl-( $\alpha$ S)- $\alpha$ ,2-diamino-1,6-dihydro-6-oxo-9H-purine-9-butanoyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

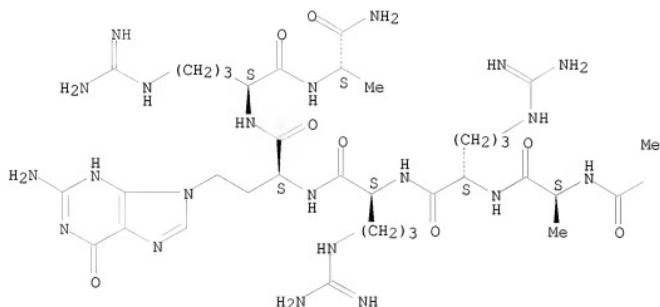


RN 756527-85-2 CAPLUS

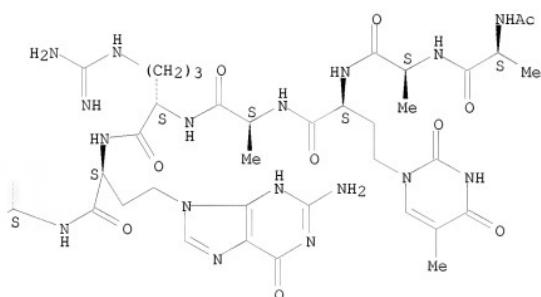
CN L-Alaninamide, N-acetyl-L-alanyl-L-alanyl-(αS)-α-amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinylbutanoyl-L-alanyl-L-arginyl-(αS)-α,2-diamino-1,6-dihydro-6-oxo-9H-purine-9-butanoyl-L-alanyl-L-alanyl-L-arginyL-L-arginyL-(αS)-α,2-diamino-1,6-dihydro-6-oxo-9H-purine-9-butanoyl-L-arginyL-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

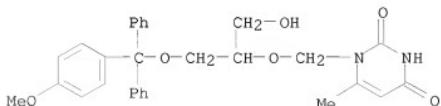
PAGE 1-A



PAGE 1-B

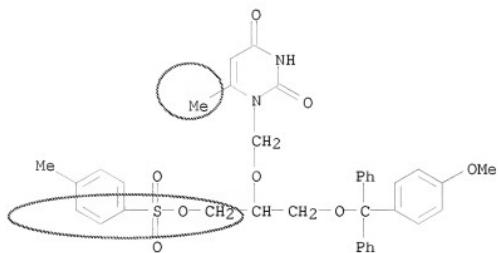
OSC.G 4  
RE.CNT 15THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)  
THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 35 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2004:396295 CAPLUS  
 DN 141:106690  
 TI Syntheses of novel modified acyclic purine and pyrimidine nucleosides as potential substrates of herpes simplex virus type-1 thymidine kinase for monitoring gene expression  
 AU Grote, Michaela; Noll, Steffi; Noll, Bernhard; Johannsen, Bernd; Kraus, Werner  
 CS Institut fuer Bioanorganische und Radiopharmazeutische Chemie, Forschungszentrum Rossendorf, Dresden, 01314, Germany  
 SO Canadian Journal of Chemistry (2004), 82(4), 513-523  
 CODEN: CJCHAG; ISSN: 0008-4042  
 PB National Research Council of Canada  
 DT Journal  
 LA English  
 OS CASREACT 141:106690  
 AB Suicide gene therapy with the herpes simplex virus type-1 thymidine kinase gene (HSV-1 tk) is considered to be a promising approach to the treatment of cancer. Making use of the lower specificity of the viral enzyme compared to human thymidine kinase, the therapy involves the administration of antiviral agents (e.g., ganciclovir) as prodrugs to induce enzymic cell death in those cells that express the transferred gene. <sup>18</sup>F-labeled derivs. have been described for monitoring location, duration, and magnitude of the viral kinase enzyme activity by positron emission tomog. (PET). Since an optimal radiotracer has not been developed, novel substances were synthesized for monitoring gene expression. A group of 13 nucleoside analogs were synthesized, among them N1-methyl-9-[(1,3-dihydroxy-2-propoxy)methyl]guanine and N1-methyl-9-[(4-hydroxy)-3-hydroxymethylbutyl]guanine as Me analogs of ganciclovir and penciclovir and their related fluoro compds. Further novel derivs. include N6-methyl-9-[(1,3-dihydroxy-2-propoxy)methyl]-, N6-methyl-9-[(4-hydroxy)-3-hydroxymethylbutyl]adenine, as well as the uracil derivs. 5-hydroxy-1-[(1,3-dihydroxy-2-propoxy)methyl]uracil, 6-methyl-1-[(1,3-dihydroxy-2-propoxy)-methyl]uracil, and its 3-fluoro-derivative  
 IT 718633-26-2P 718633-27-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (syntheses of novel modified acyclic purine and pyrimidine nucleosides as potential substrates of HSV-1 thymidine kinase for monitoring gene expression)  
 RN 718633-26-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-hydroxy-1-[[[(4-methoxyphenyl)diphenylmethoxy]methyl]ethoxy]methyl]-6-methyl- (CA INDEX NAME)



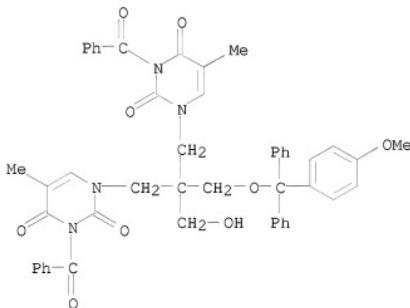
RN 718633-27-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[1-[[[(4-

methoxyphenyl)diphenylmethoxy|methyl]-2-[{(4-methoxyphenyl)sulfonyloxy]ethoxy|methyl}-6-methyl- (CA INDEX NAME)

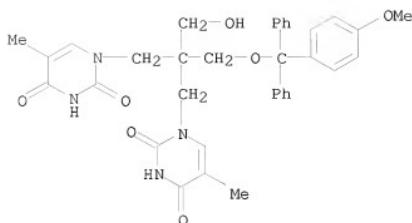


OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)  
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 36 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2003:958246 CAPLUS  
 DN 140:199626  
 TI Synthesis and stability of oligonucleotides containing acyclic achiral nucleoside analogues with two base moieties  
 AU Wu, Tongfei; Froeyen, Matheus; Schepers, Guy; Mullens, Kristof; Rozenski, Jef; Busson, Roger; Van Aerschot, Arthur; Herdewijn, Piet  
 CS Laboratory of Medicinal Chemistry, Rega Institute for Medicinal Research, Katholieke Universiteit Leuven, Louvain, B-3000, Belg.  
 SO Organic Letters (2004), 6(1), 51-54  
 CODEN: ORLEF7; ISSN: 1523-7060  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 140:199626  
 AB Nucleotide building blocks with two base moieties were synthesized and incorporated into oligonucleotides. One of the two bases is involved in base pairing within the double helix, while the other base is sticking out of the minor groove. This system may be used for presenting sequence information at the outside of the helix.  
 IT 650619-73-1P 650619-75-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and stability of oligonucleotides containing acyclic achiral nucleoside analogs with two base moieties)  
 RN 650619-73-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2-(hydroxymethyl)-2-[(4-methoxyphenyl)diphenylmethoxy]methyl)-1,3-propanediyl]bis[3-benzoyl-5-methyl- (9CI) (CA INDEX NAME)



RN 650619-75-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(2-(hydroxymethyl)-2-[(4-methoxyphenyl)diphenylmethoxy]methyl)-1,3-propanediyl]bis[5-methyl- (9CI) (CA INDEX NAME)

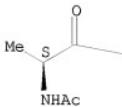


OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)  
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

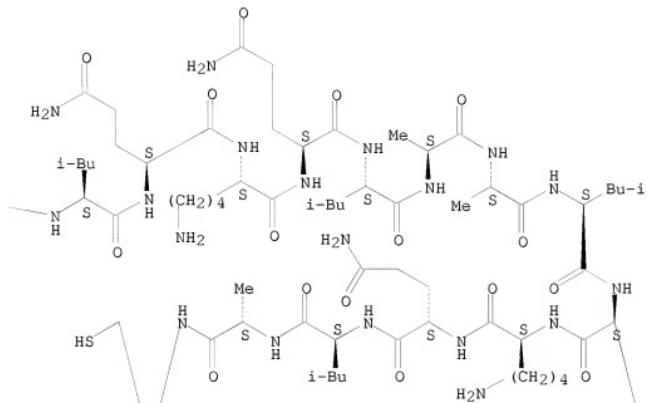
L11 ANSWER 37 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2003:828740 CAPLUS  
 DN 139:381735  
 TI Complementary nucleobase interaction enhances peptide-peptide recognition and self-replicating catalysis  
 AU Matsumura, Sachiko; Takahashi, Tsuyoshi; Ueno, Akihiko; Mihara, Hisakazu  
 CS Department of Bioengineering, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Yokohama, 226-8501, Japan  
 SO Chemistry--A European Journal (2003), 9(19), 4829-4837  
 CODEN: CEUJD; ISSN: 0947-6539  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 OS CASREACT 139:381735  
 AB The availability of the complementary interaction of nucleobases for influencing the formation of peptide architectures was explored. Nucleobases were incorporated as addnl. recognition elements in coiled-coil peptides by employing nucleobase amino acids (NBAs), which are artificial L- $\alpha$ -amino  $\gamma$ -nucleobase-butrylic acids. The effect of the base-pair interaction on intermol. recognition between peptides was evaluated through a self-replication reaction. The self-replication reactions of the peptides with complementary base pairs such as thymine-adanine or guanine-cytosine at the g-g' heptad positions were accelerated in comparison with those of the peptides with mismatched base pairs or without nucleobases. However, thymine-adanine pairs at the e-e' positions did not enhance the self-replication. In the presence of a denaturant, the enhancement effects of complementary base pairs on the reaction disappeared. Thermal denaturation studies showed that the thymine-adanine pairs contributed to stabilization of the coiled-coil structure and that the pairs at the g-g' positions were more effective than those at the e-e' positions. The peptide-peptide interaction was reinforced by complementary nucleobase interactions appropriately arranged in the peptide structure; these led to acceleration of the self-replication reactions.  
 IT 623950-35-6P 623950-38-9P  
 RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)  
 (effect of complementary nucleobase interaction on peptide-peptide recognition and self-replicating catalysis)  
 RN 623950-35-6 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-leucyl-L-alanyl-L-alanyl-L-leucyl-(aS)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-lysyl-L-glutaminyl-L-leucyl-L-alanyl-L-cysteinyl-L-leucyl-(aS)- $\alpha$ ,6-diamino-9H-purine-9-butanoyl-L-lysyl-L-glutaminyl-L-leucyl-L-alanyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



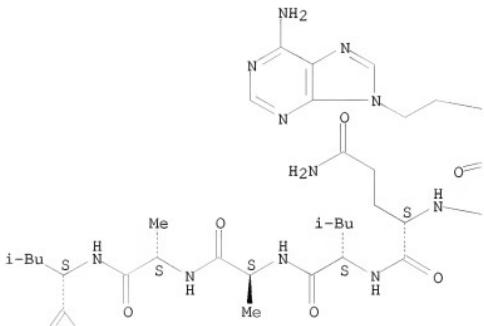
PAGE 1-B



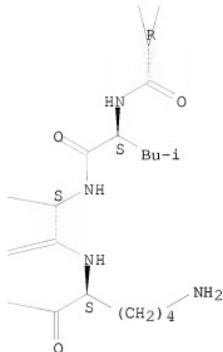
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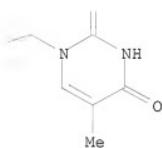
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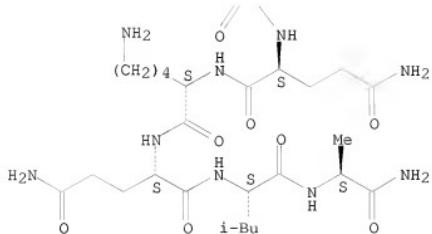
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PAGE 2-C



PAGE 3-A



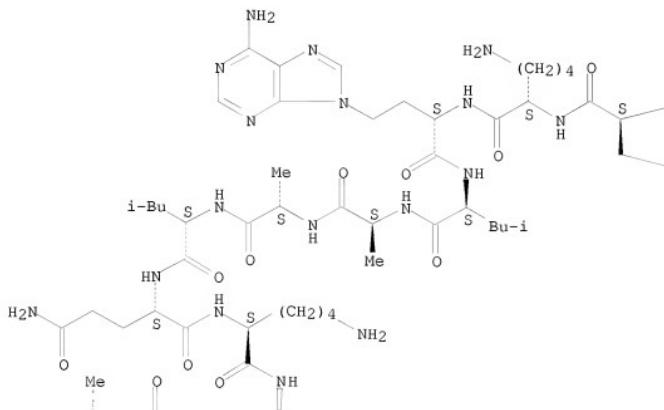
RN 623950-38-9 CAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-leucyl-L-alanyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-

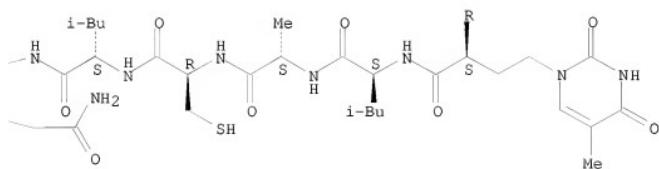
( $\alpha S$ )- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-leucyl-L-alanyl-L-cysteinyl-L-leucyl-L-glutaminyl-L-lysyl-( $\alpha S$ )- $\alpha$ , $\alpha$ -diamino-9H-purine-9-butanoyl-L-leucyl-L-alanyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

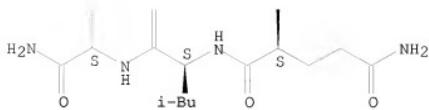
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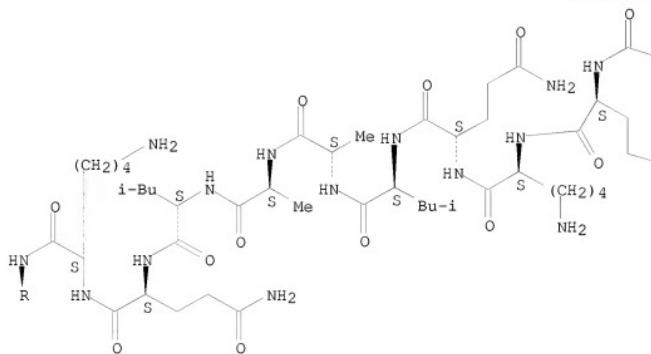
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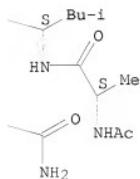
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PAGE 3-A



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IT 623950-41-4P

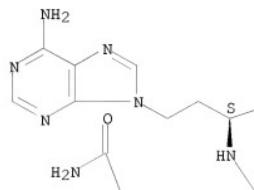
RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)  
 (effect of complementary nucleobase interaction on peptide-peptide)

recognition and self-replicating catalysis)

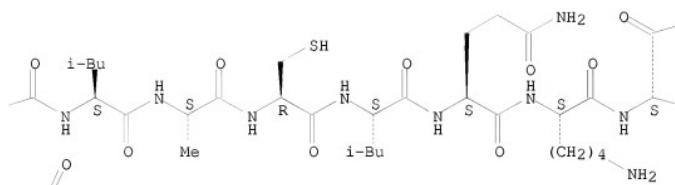
RN 623950-41-4 CAPLUS  
 CN L-Alaninamide, N-acetyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-leucyl-L-alanyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-( $\alpha S$ )- $\alpha$ ,6-diamino-9H-purine-9-butanoyl-L-leucyl-L-alanyl-L-cysteinyl-L-leucyl-L-glutaminyl-L-lysyl-( $\alpha S$ )- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-leucyl-L-alanyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

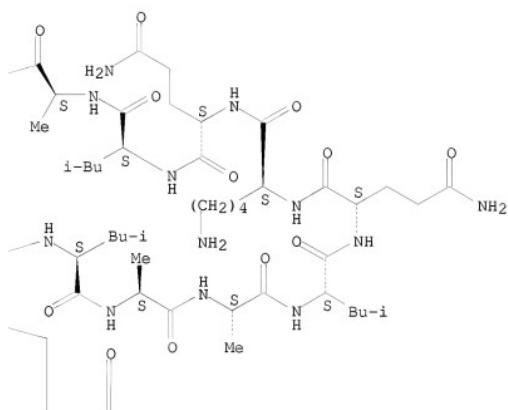
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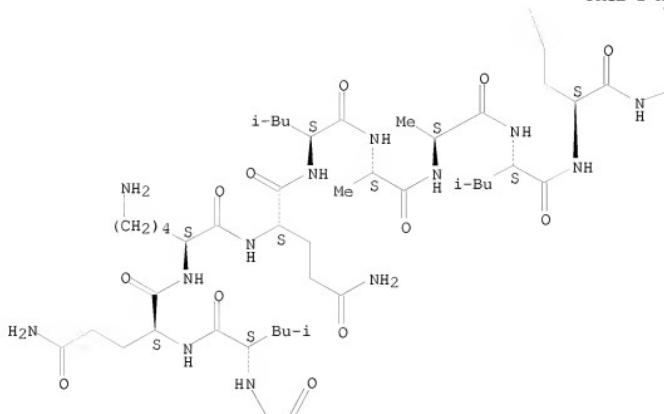
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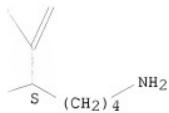
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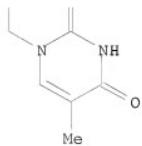
PAGE 2-A



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PAGE 3-A



IT 623950-33-4P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(effect of complementary nucleobase interaction on peptide-peptide recognition and self-replicating catalysis)

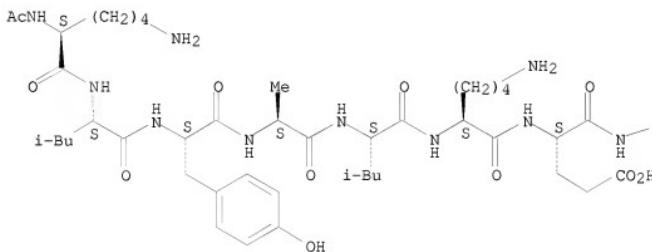
RN 623950-33-4 CAPLUS

CN L-Alanine, N2-acetyl-L-lysyl-L-leucyl-L-tyrosyl-L-alanyl-L-leucyl-L-lysyl-L- $\alpha$ -glutamyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-leucylglycyl-L-alanyl-L-leucyl-L-lysyl-L- $\alpha$ -glutamyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-leucylthio-, 17-S-(3-ethoxy-3-oxopropyl) ester (9CI) (CA INDEX NAME)

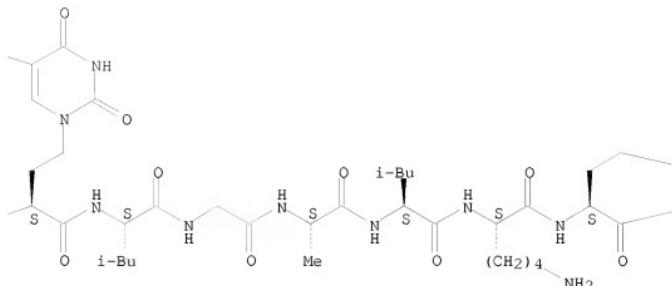
Absolute stereochemistry.

PAGE 1-A

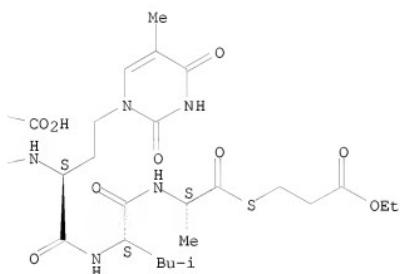
Me—



PAGE 1-B

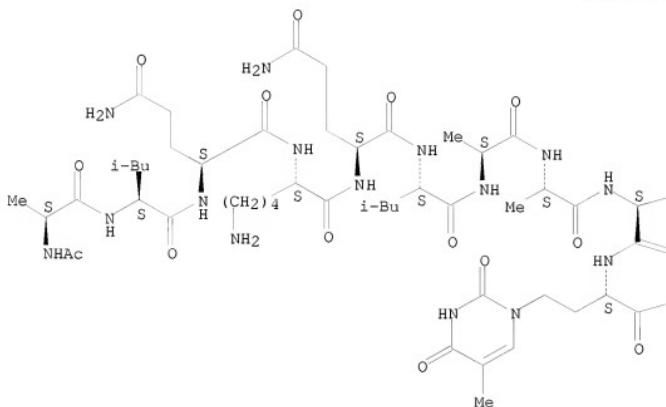


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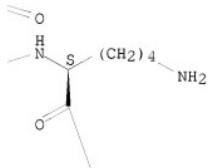


- IT 623950-36-7P 623950-39-0P 623950-43-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (effect of complementary nucleobase interaction on peptide-peptide recognition and self-replicating catalysis)
- RN 623950-36-7 CAPLUS
- CN L-Alanine, N-acetyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-leucyl-L-alanyl-L-alanyl-L-leucyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-lysyl-L-glutaminyl-L-leucylthio-, S-(3-ethoxy-3-oxopropyl) ester (9CI) (CA INDEX NAME)

### Absolute stereochemistry.



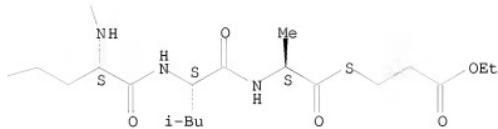
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PAGE 2-B

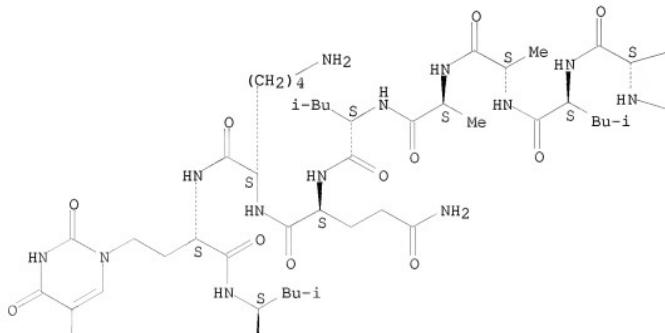


RN 623950-39-0 CAPLUS

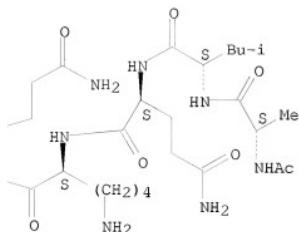
CN L-Alanine, N-acetyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-leucyl-L-alanyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-leucylthio-, S-(3-ethoxy-3-oxopropyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

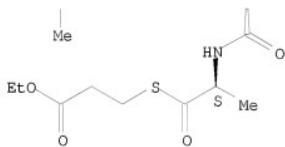
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PAGE 1-B



PAGE 2-A

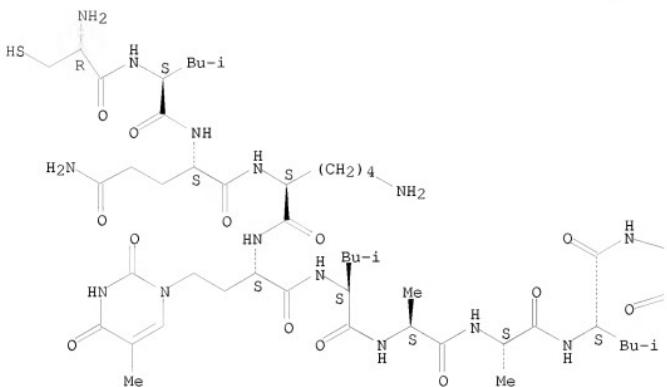


RN 623950-43-6 CAPLUS

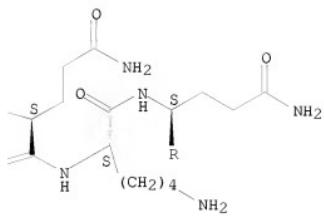
CN L-Alaninamide, L-cysteinyl-L-leucyl-L-glutaminyl-L-lysyl-( $\alpha$ S)-  
 - $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-  
 leucyl-L-alanyl-L-alanyl-L-leucyl-L-glutaminyl-L-lysyl-L-glutaminyl-L-  
 leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

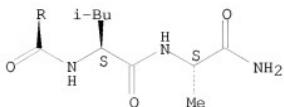
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PAGE 1-B

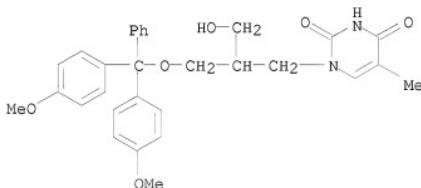


PAGE 2-A



OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)  
RE.CNT 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 38 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2003:755804 CAPLUS  
 DN 140:271121  
 TI Acyclic, achiral enamide nucleoside analogues. The importance of the C:C bond in the analogue for its ability to mimic natural nucleosides  
 AU Petersen, Asger B.; Petersen, Michael Ae.; Henriksen, Ulla; Hammerum, Steen; Dahl, Otto  
 CS Department of Chemistry, The H. C. Orsted Institute, University of Copenhagen, Copenhagen, DK-2100, Den.  
 SO Organic & Biomolecular Chemistry (2003), 1(19), 3293-3296  
 CODEN: OBCRAK; ISSN: 1477-0520  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 140:271121  
 AB The conformations of an acyclic, achiral enamide thymidine analog I have been studied by model building and geometry calcns., as well as by NMR NOE and UV expts. The results indicate that there are no significant barriers to rotation around any of the  $\sigma$  bonds, in particular the N1-C1' enamide bond, and that the analog should be able to accommodate conformations that mimic the conformations of natural nucleosides in A- and B-type helixes quite well. For comparison the saturated analog II has been prepared and built into oligonucleotides. It is shown that incorporation of II in oligonucleotides results in a much larger depression of the melting temperature ( $\Delta T_m$  -10 to -12.5 °C) than does incorporation of I ( $\Delta T_m$  -5 to -6.5 °C).  
 IT 666237-25-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and phosphorylation of; importance of the C:C bond in an acyclic, achiral enamide nucleoside analog for its ability to mimic natural nucleosides)  
 RN 666237-25-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-(hydroxymethyl)propyl]-5-methyl- (CA INDEX NAME)

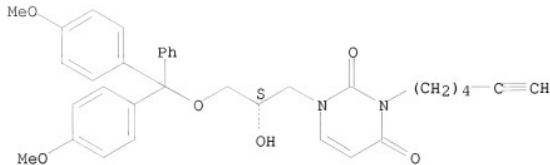


OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
 RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 39 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2003:356095 CAPLUS  
 DN 138:338411  
 TI Preparation of oligonucleotide labeling reactants based on acyclic nucleosides and conjugates derived thereof  
 IN Hovinen, Jari  
 PA Wallac Oy, Finland  
 SO Eur. Pat. Appl., 31 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1308452	A2	20030507	EP 2002-396153	20021010
	EP 1308452	A3	20041027		
	EP 1308452	B1	20080319		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 20030118999	A1	20030626	US 2001-985454	20011102
	US 7282581	B2	20071016		
	AT 389663	T	20080415	AT 2002-396153	20021010
PRAI	US 2001-985454	A	20011102		
AB	The invention relates to a labeling reactant of formula I useful for labeling an oligonucleotide wherein: R is a temporary protecting group; A is either a phosphorylating moiety or a solid support tethered to Z via a linker arm E; Z is a bridge point; E is a linker arm between R and Z; E1 is a linker arm between Z and Z1; E2 is a linker arm between Z and A; E3 is a linker arm between Z1 and G; Z1 is a purine or pyrimidine base; G is a protected bivalent aromatic structure, tethered to two iminodiacetic acid ester, protected functional group, protected or unprotected organic dye, hapten or a spin label. The invention also relates to a labeling reactant analogous to the one defined above useful for labeling an oligo- or polynucleotide using polymerases. The invention further relates to an oligonucleotide or polynucleotide conjugate that can be synthesized using said reactants. Thus, (S)-1-[3-(4,4'-dimethoxytrityl-2,3-dihydroxypropyl)-3-O-(2-cyanoethyl-N,N-diisopropyl)phosphoramidato]-3-(N6-trifluoroacetamidohexyl)uracil was prepared				
IT	494784-04-2P	494784-07-5P	518027-18-4P		
	518027-22-0P				
	RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
	(preparation of oligonucleotide labeling reactants based on acyclic nucleosides and conjugates derived thereof)				
RN	494784-04-2	CAPLUS			
CN	2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-3-(5-hexenyl-1-yl)-	(CA INDEX NAME)			

Absolute stereochemistry.

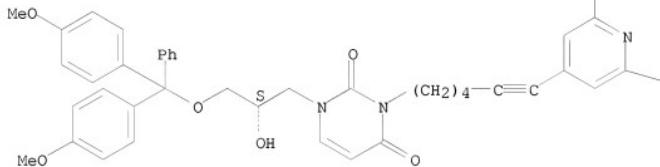
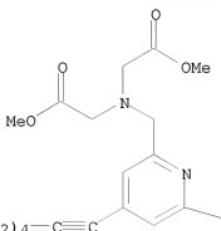


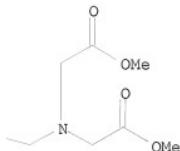
RN 494784-07-5 CAPLUS

CN Glycine, N,N'-[4-[6-[3-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-3,6-dihydro-2,6-dioxo-1(2H)-pyrimidinyl]-1-hexynyl]-2,6-pyridinediyil]bis(methylene)]bis[N-(2-methoxy-2-oxoethyl)-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

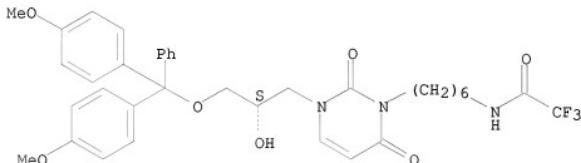




RN 518027-18-4 CAPLUS

CN Acetamide, N-[6-[3-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-3,6-dihydro-2,6-dioxo-1(2H)-pyrimidinyl]hexyl]-2,2,2-trifluoro- (CA INDEX NAME)

Absolute stereochemistry.

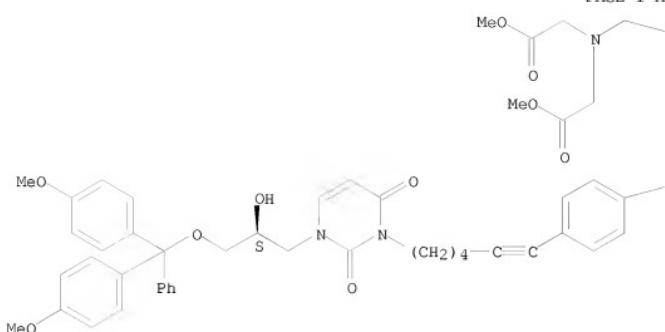


RN 518027-22-0 CAPLUS

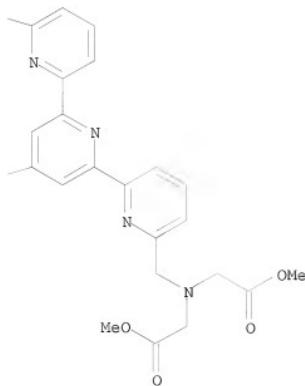
CN Glycine, N,N'-(4-[4-[6-[3-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-3,6-dihydro-2,6-dioxo-1(2H)-pyrimidinyl]-1-hexynyl]phenyl][2,2':6',2''-terpyridine]-6,6''-diyl]bis(methylene)]bis[N-(2-methoxy-2-oxoethyl)-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



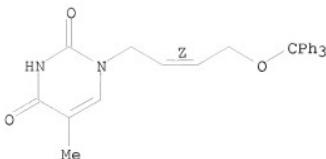
PAGE 1-B



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

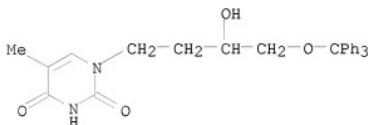
L11 ANSWER 40 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2003:78918 CAPLUS  
 DN 139:143325  
 TI Non-nucleoside inhibitors of mitochondrial thymidine kinase (TK-2) differentially inhibit the closely related herpes simplex virus type 1 TK and *Drosophila melanogaster* multifunctional deoxynucleoside kinase  
 AU Baizarini, Jan; Hernandez, Ana-Isabel; Roche, Philippe; Esnouf, Robert; Karlsson, Anna; Camarasa, Maria-Jose; Perez-Perez, Maria-Jesus  
 CS Rega Institute for Medical Research, Katholieke Universiteit Leuven, Louvain, Belg.  
 SO Molecular Pharmacology (2003), 63(2), 263-270  
 CODEN: MOPMA3; ISSN: 0026-895X  
 PB American Society for Pharmacology and Experimental Therapeutics  
 DT Journal  
 LA English  
 AB 5'-O-Triptyl derivs. of thymidine (dTd), (E)-5-(2-bromovinyl)-2'-deoxyuridine (BVDU), and their acyclic analogs 1-[{Z}-4-triphenylmethoxy-2'-butenyl]thymine (KIN-12) and (E)-5-(2-bromovinyl)-1-[{Z}-4-triphenylmethoxy-2'-butenyl]uracil (KIN-52) have been synthesized and evaluated for their inhibitory activity against the amino acid sequence related mitochondrial dTdh kinase (TK-2), herpes simplex virus type 1 (HSV-1) TK, and *Drosophila melanogaster* multifunctional 2'-deoxynucleoside kinase (Dm-dNK). Several compds. proved markedly inhibitory to these enzymes and represent a new generation of nucleoside kinase inhibitors. KIN-52 was the most potent and selective inhibitor of TK-2 (IC<sub>50</sub>, 1.3  $\mu$ M; Ki, 0.50  $\mu$ M; Ki/Km, 0.37) but was not inhibitory against HSV-1 TK and Dm-dNK at 100  $\mu$ M. As found for the alternative substrate BVDU, the triptylated compds. competitively inhibited the three enzymes with respect to dTdh. However, whereas BVDU behaved as a noncompetitive inhibitor (alternative substrate) of TK-2 and HSV-1 TK with respect to ATP as the varying substrate, the novel triptylated enzyme inhibitors emerged as reversible purely uncompetitive inhibitors of these enzymes. Computer-assisted modeling studies are in agreement with these findings. The triptylated compds. do not act as alternative substrates and they showed a type of kinetics against the nucleoside kinases different from that of BVDU. KIN-12, and particularly KIN-52, are the very first non-nucleoside specific inhibitors of TK-2 reported and may be useful for studying the physiol. role of the mitochondrial TK-2 enzyme.  
 IT 471256-44-7 471256-50-5  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (non-nucleoside inhibitors of mitochondrial thymidine kinase (TK-2) differentially inhibit the closely related herpes simplex virus type 1 TK and *Drosophila melanogaster* multifunctional deoxynucleoside kinase)  
 RN 471256-44-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[{(2Z)-4-(triphenylmethoxy)-2-buten-1-yl}-( CA INDEX NAME)

Double bond geometry as shown.



RN 471256-50-5 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-hydroxy-4-(triphenylmethoxy)butyl]-5-methyl- (CA INDEX NAME)



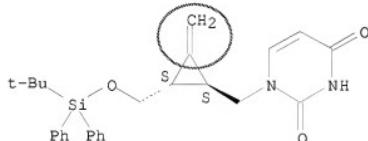
OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

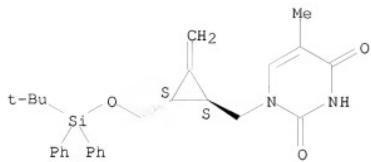
L11 ANSWER 41 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2003:12245 CAPLUS  
 DN 138:255000  
 TI Synthesis and antiviral activity of novel exomethylene cyclopropyl pyrimidine nucleosides  
 AU Kook, Min Chul; Kim, Gu; Kwak, Eun Yee; Hong, Joon Hee; Lee, Chong Kyo;  
 Choi, Bo Gil  
 CS Department of Medicinal Chemistry, College of Pharmacy, Chonnam National University, Kwangju, 500-757, S. Korea  
 SO Archives of Pharmacal Research (2002), 25(6), 790-794  
 CODEN: APHRDQ; ISSN: 0253-6269  
 PB Pharmaceutical Society of Korea  
 DT Journal  
 LA English  
 OS CASREACT 138:255000  
 AB A series of novel exomethylene cyclopropyl nucleosides, e.g. I, were synthesized starting from Feist's acid. Classical nucleophilic substitution conditions (K<sub>2</sub>CO<sub>3</sub>, 18-crown-6) of the tosylate as well as Mitsunobu reaction (DEAD, PPh<sub>3</sub>) of alcs. with pyrimidine bases afforded a series of novel cyclopropyl nucleosides. Compound I displayed moderate anti-HBV activity without any cytotoxicity up to 100 μM.  
 IT 502614-51-9P 502614-53-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and antiviral activity of novel exomethylene cyclopropyl pyrimidine nucleosides)  
 RN 502614-51-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2R)-2-[(1,1-dimethylethyl)diphenylsilyl]oxy)methyl]-3-methylenecyclopropylmethyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.



RN 502614-53-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2R)-2-[(1,1-dimethylethyl)diphenylsilyl]oxy)methyl]-3-methylenecyclopropylmethyl]-5-methyl-, rel- (CA INDEX NAME)

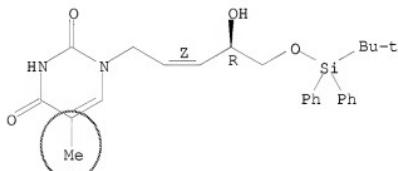
Relative stereochemistry.



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 42 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:977465 CAPLUS  
 DN 138:153760  
 TI An Expedited and Efficient Procedure for the Synthesis of Unsaturated Acyclonucleosides of Z Configuration Related to D4T  
 AU Bravo, Fernando; Viso, Antonio; Castillon, Sergio  
 CS Departament de Quimica Analitica i Quimica Organica, Facultat de Quimica, Universitat Rovira i Virgili, Tarragona, 43005, Spain  
 SO Journal of Organic Chemistry (2003), 68(3), 1172-1175  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 138:153760  
 AB Enantiopure 2,5-dihydrofuran derivs. were prepared from (S)-glycidol through a new reaction sequence involving epoxide opening with a vinylcuprate, selenium-induced cyclization to give exclusively the 5-endo product, and regioselective selenoxide elimination. Unsatd. acyclo-nucleosides of Z configuration were obtained in a straightforward manner by treating 2,5-dihydrofuran with iodotrimethylsilane in the presence of silylated purinic or pyrimidinic bases. This synthetic process involves opening of the dihydrofuran ring by trimethylsilyl iodide and substitution of iodine by the nucleic base in a single reaction step.  
 IT 494834-50-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of unsatd. acyclonucleosides of Z configuration related to D4T from (S)-glycidol via epoxide opening, cyclization, and regioselective elimination reactions)  
 RN 494834-50-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2Z,4R)-5-[(1,1-dimethylethyl)diphenylsilyl]oxy]-4-hydroxy-2-penten-1-yl]-5-methyl- (CA INDEX NAME)

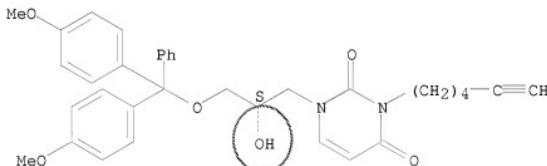
Absolute stereochemistry. Rotation (-).  
 Double bond geometry as shown.



OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
 RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 43 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:831342 CAPLUS  
 DN 138:298260  
 TI Oligonucleotide conjugates based on acyclonucleosides and their use in DNA hybridization assays  
 AU Hakala, Harri; Ollikka, Pia; Degerholm, Jenni; Hovinen, Jari  
 CS PerkinElmer Life Sciences, Turku, FIN-20101, Finland  
 SO Tetrahedron (2002), 58(43), 8771-8777  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 AB Synthesis of two oligonucleotide building blocks based on acyclonucleosides (10, 11) which enable the introduction of several nonluminescent and luminescent lanthanide(III) chelates to the oligonucleotide structure is described. They were used in an instrument-assisted DNA synthesis in a standard manner. A modified deprotection procedure was used to ensure metal complexation. Also the applicability of these oligonucleotide conjugates to DNA hybridization assays is demonstrated.  
 IT 494784-04-2P 494784-07-5P 494784-09-7P  
 494784-12-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (oligonucleotide conjugates based on acyclonucleosides and their use in DNA hybridization assays)  
 RN 494784-04-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-3-(5-hexyn-1-yl)- (CA INDEX NAME)

Absolute stereochemistry.

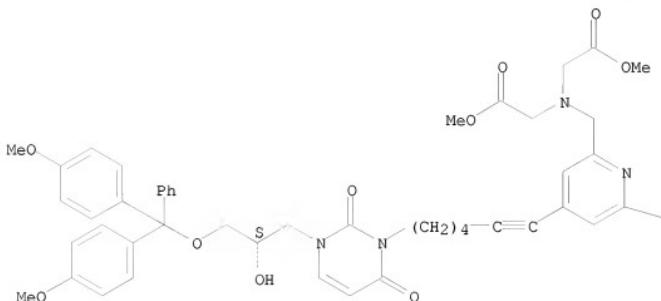


R10 is not -OH in compound claim 14

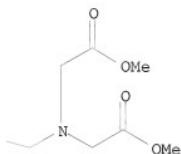
RN 494784-07-5 CAPLUS  
 CN Glycine, N,N'-[4-[6-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-3,6-dihydro-2,6-dioxo-1(2H)-pyrimidinyl]-1-hexynyl]-2,6-pyridinediy]bis(methylene)]bis[N-(2-methoxy-2-oxoethyl)-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

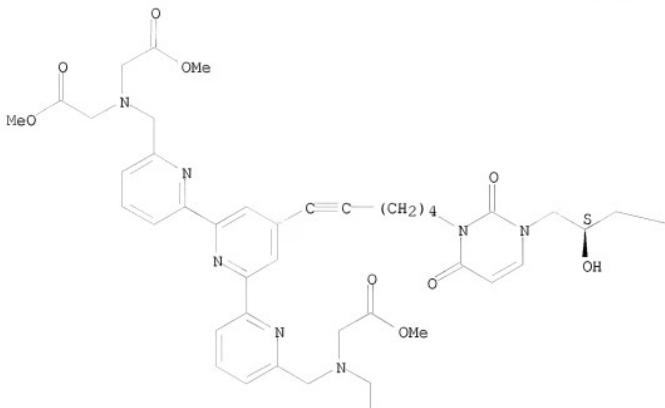


RN 494784-09-7 CAPLUS

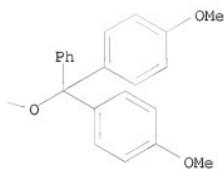
CN Glycine, N,N'-[{4'-[6-[3-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-3,6-dihydro-2,6-dioxo-1(2H)-pyrimidinyl]-1-hexynyl][2,2':6',2''-terpyridine]-6,6''-diyl]bis(methylene)]bis[N-(2-methoxy-2-oxoethyl)-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

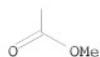
PAGE 1-A



PAGE 1-B



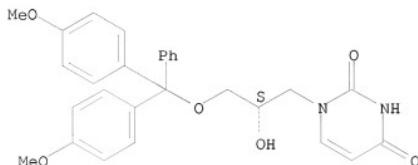
PAGE 2-A



RN 494784-12-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]- (CA INDEX NAME)

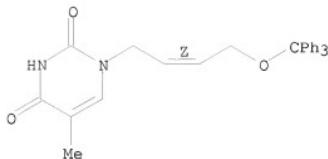
Absolute stereochemistry. Rotation (-).



OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)  
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 44 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:610836 CAPLUS  
 DN 137:311143  
 TI Acyclic Nucleoside Analogs as Novel Inhibitors of Human Mitochondrial Thymidine Kinase  
 AU Hernandez, Ana-Isabel; Balzarini, Jan; Karlsson, Anna; Camarasa, Maria-Jose; Perez-Perez, Maria-Jesus  
 CS Instituto de Quimica Medica (CSIC), Madrid, 28006, Spain  
 SO Journal of Medicinal Chemistry (2002), 45(19), 4254-4263  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 137:311143  
 AB Acyclic nucleoside analogs of 5'-O-tritylthymidine have been synthesized and evaluated as potential human mitochondrial thymidine kinase (TK-2) inhibitors. In this series, the sugar moiety of the parent 5'-O-tritylthymidine has been replaced by aliphatic chains including (E)- and (Z)-butenyl, butynol, or butanol. Among them the (Z)-butenyl derivative [I, Q = (Z)-CH:CH] showed an IC<sub>50</sub> against TK-2 of 1.5  $\mu$ M, being 1 order of magnitude more potent than the parent 5'-O-tritylthymidine. This lead compound has been further modified by replacing the thymine base by other pyrimidine bases such as 5-iodouracil, 5-ethyluracil, 5-methylcytosine, 3-N-methylthymine, or 5,6-dihydrothymine, as well as by the purine base guanine. The trityl group has also been replaced by different aliphatic and aromatic acyl moieties including tert-butylacetyl, hexanoyl, decanoyl, and diphenylacetyl moieties. The evaluation of the compds. against TK-2 and the phylogenetically close HSV-1 TK has shown that the base moiety plays a crucial role in their interaction against these pyrimidine nucleoside kinases. Also, the presence of a lipophilic substituent, preferentially an aromatic moiety such as diphenylmethyl or triphenylmethyl, is required for efficient TK-2 inhibition. Whereas some compds. showed marked specificity for either TK-2 (i.e., the 5,6-dihydrothymine derivative) or HSV-1 TK [i.e., the butynyl derivative, I (Q = C.tplbond.C)], some others, including the (Z)-and (E)-butenyl derivs., showed significant inhibition against both enzymes. They also proved to be inhibitory against HSV-1 TK in intact human osteosarcoma cells that were transduced with the HSV-1 TK gene.  
 IT 471256-44-7P  
 RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
 (acyclic nucleoside analogs of 5'-O-tritylthymidine as inhibitors of human mitochondrial thymidine kinase)  
 RN 471256-44-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[(2Z)-4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)

Double bond geometry as shown.



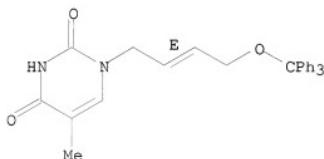
IT 471256-47-0P 471256-50-5P 471256-51-6P  
 471256-52-7P 471256-59-4P 471256-60-7P  
 471256-61-8P 471256-64-1P

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (acyclic nucleoside analogs of 5'-O-tritylthymidine as inhibitors of human mitochondrial thymidine kinase)

RN 471256-47-0 CAPLUS

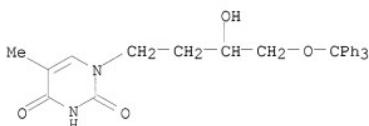
CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[(2E)-4-(triphenylmethoxy)-2-butenyl]- (CA INDEX NAME)

Double bond geometry as shown.



RN 471256-50-5 CAPLUS

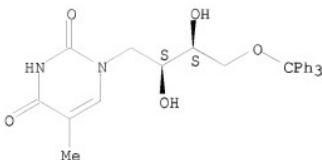
CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-hydroxy-4-(triphenylmethoxy)butyl]-5-methyl- (CA INDEX NAME)



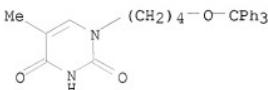
RN 471256-51-6 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2R,3R)-2,3-dihydroxy-4-(triphenylmethoxy)butyl]-5-methyl-, rel- (CA INDEX NAME)

Relative stereochemistry.

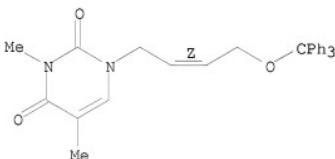


RN 471256-52-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[4-(triphenylmethoxy)butyl]- (CA INDEX NAME)

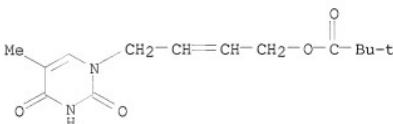


RN 471256-59-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 3,5-dimethyl-1-[(2Z)-4-(triphenylmethoxy)-2-buten-1-yl]- (CA INDEX NAME)

Double bond geometry as shown.

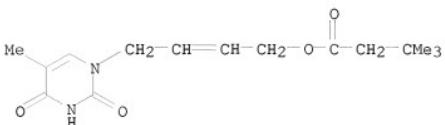


RN 471256-60-7 CAPLUS  
 CN Propanoic acid, 2,2-dimethyl-, 4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-buten-1-yl ester (CA INDEX NAME)



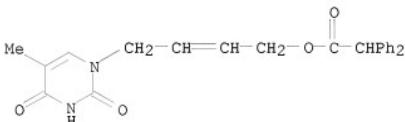
RN 471256-61-8 CAPLUS  
 CN Butanoic acid, 3,3-dimethyl-, 4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-

pyrimidinyl)-2-buten-1-yl ester (CA INDEX NAME)



RN 471256-64-1 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -phenyl-,  
4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-buten-1-yl ester  
(CA INDEX NAME)



OSC.G 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)  
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 45 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:595034 CAPLUS  
 DN 137:151580  
 TI Oligonucleotide analogs containing linked bases, methods for their synthesis, and their use in modulating gene expression and treatment of diseases

IN Segev, David  
 PA Bio-Rad Laboratories, Inc., USA  
 SO PCT Int. Appl., 148 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002061110	A2	20020808	WO 2002-IL83	20020129
WO 2002061110	A3	20030206		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2436665	A1	20020808	CA 2002-2436665	20020129
AU 2002230058	A1	20020812	AU 2002-230058	20020129
AU 2002230058	B2	20051117		
US 20030191074	A1	20031009	US 2002-57928	20020129
US 7034131	B2	20060425		
EP 1363640	A2	20031126	EP 2002-711178	20020129
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004537503	T	20041216	JP 2002-561045	20020129
US 20060148751	A1	20060706	US 2006-365928	20060302
US 7348148	B2	20080325		
US 200900005334	A1	20090101	US 2008-71275	20080219
PRAI US 2001-264308P	P	20010129		
US 2002-57928	A3	20020129		
WO 2002-IL83	W	20020129		
US 2006-365928	A1	20060302		
OS MARPAT 137:151580				
AB Nucleic acid and oligonucleotide analogs containing nucleobases attached to chiral carbons in the backbone and containing $\geq 1$ pairs of adjacent nucleobases covalently linked together are disclosed. The backbone may be a polyether, e.g., PEG, or polyether derivs. such as poly(ether-thioether), poly(ether-sulfone), and poly(ether-sulfoxide). Linked dimer building blocks and methods for their synthesis as well as methods for solution or solid phase synthesis of the oligo- and polynucleotide analogs are disclosed. The analogs may be used to modulate gene expression and to treat diseases. Thus, the solution phase and solid phase synthesis of PEG-linked oligo-T was demonstrated. The synthesis of a thymidine-linked thymidine dimer with PEG backbone was also shown.				
IT 445377-43-5P	445377-44-6P	445377-45-7P		
445377-46-8P	445377-48-0P	445377-49-1P		

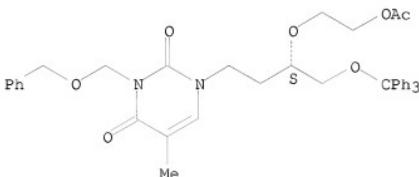
445377-50-4P 445377-54-8DP, conjugates with Wang resin  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(oligonucleotide analogs containing linked bases, methods for their synthesis, and their use in modulating gene expression and treatment of diseases)

RN 445377-43-5 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(3S)-3-[2-(acetoxy)ethoxy]-4-(triphenylmethoxy)butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

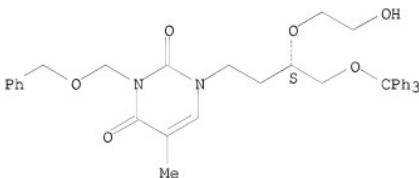
Absolute stereochemistry.



RN 445377-44-6 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(3S)-3-(2-hydroxyethoxy)-4-(triphenylmethoxy)butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

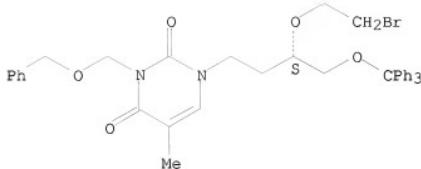
Absolute stereochemistry.



RN 445377-45-7 CAPLUS

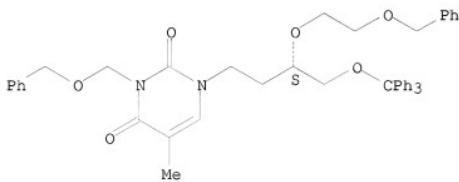
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(3S)-3-(2-bromoethoxy)-4-(triphenylmethoxy)butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 445377-46-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-methyl-1-[(3S)-3-[2-(phenylmethoxy)ethoxy]-4-(triphenylmethoxy)butyl]-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

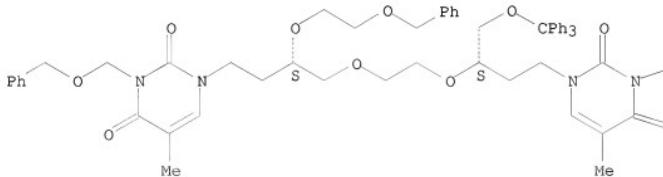
Absolute stereochemistry.



RN 445377-48-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(3S,9S)-9-[2-[3,4-dihydro-5-methyl-1,2,4-dioxo-3-[(phenylmethoxy)methyl]-1-(2H)-pyrimidinyl]ethyl]-14-phenyl-3-[(triphenylmethoxy)methyl]-4,7,10,13-tetraoxatetradec-1-yl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

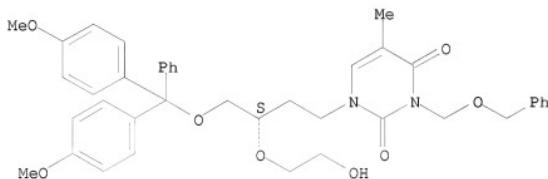




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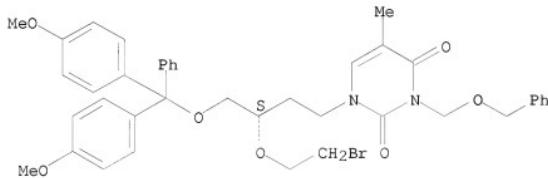
RN 445377-49-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(3S)-4-[bis(4-methoxyphenyl)phenylmethoxy]-3-(2-hydroxyethoxy)butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 445377-50-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(3S)-4-[bis(4-methoxyphenyl)phenylmethoxy]-3-(2-bromoethoxy)butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

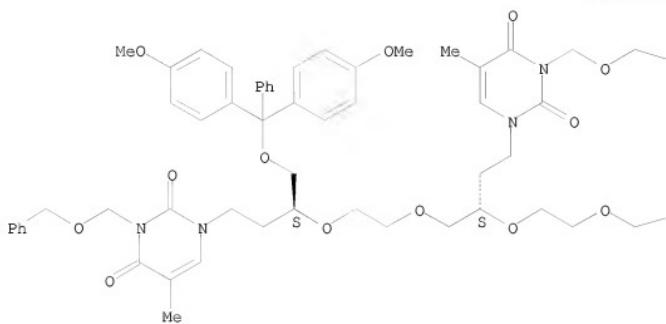
Absolute stereochemistry.



RN 445377-54-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1,1'-(3S,9S,15S)-3-[(bis(4-methoxyphenyl)phenylmethoxy)methyl]-9-[2-[3,4-dihydro-5-methyl-2,4-dioxo-3-[(phenylmethoxy)methyl]-1(2H)-pyrimidinyl]ethyl]-15-(2-hydroxyethoxy)-4,7,10,13-tetraoxaheptadecane-1,17-diyl]bis[5-methyl-3-[(phenylmethoxy)methyl]- (9CI) (CA INDEX NAME)

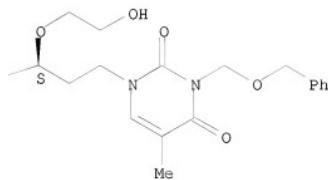
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

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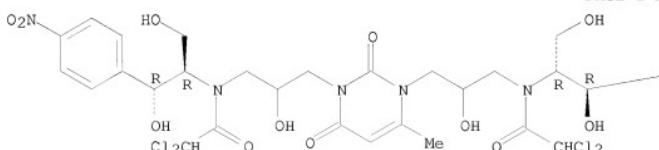
OSC.G 2  
RE.CNT 1

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)  
 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 46 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:556316 CAPLUS  
 DN 138:162972  
 TI Synthesis of pharmacological characterization of new acyclonucleoside derivatives  
 AU Krivonogov, V. P.; Kozlova, G. G.; Sivkova, G. A.; Kil'metova, I. R.;  
 Belov, A. E.; Abdurakhmanov, I. B.; Ismagilova, A. F.; Spirikhin, L. V.;  
 Kochurova, I. Yu.  
 CS Institute of Organic Chemistry, Ufa Scientific Center, Russian Academy of Sciences, Ufa, Russia  
 SO Pharmaceutical Chemistry Journal (Translation of Khimiko-Farmatsevticheskii Zhurnal) (2002), 36(1), 7-10  
 CODEN: PCJOAU; ISSN: 0091-150X  
 PB Kluwer Academic/Consultants Bureau  
 DT Journal  
 LA English  
 OS CASREACT 138:162972  
 AB A series of new pyrimidine derivs., acyclonucleosides, including 1,3-bis(2-hydroxy-3-chloropropyl)uracil (I), 1,3-bis(2-hydroxy-3-chloropropyl)-6-methyluracil (II), 1,3-(bis(2-hydroxy-3-levomycetinopropyl)uracil) (III), 1,3-bis(2-hydroxy-3-levomycetinopropyl)-6-methyluracil (IV), 1,3-bis(2-hydroxy-3-piperidinopropyl)uracil(V), and 1,3-bis(2-hydroxy-3-piperidinopropyl)-6-methyluracil (VI) was synthesized and characterized. The lethal doses, LD<sub>50</sub> values of compds. IV-VI upon i.p. administration were 5500.0±125.0, 3800.0±150.0, and 4000.0±54.4 mg/kg, resp. Compds. IV and V did not change, while VI and hydroxymethyluracil (HMU) inhibited the delay type hypersensitivity reaction. Compds. IV and VI stimulated the production of splenic antibody-forming cells upon immunization with goat erythrocytes, the effects being more pronounced compared to that of HMU and levomycetin. On the model of carrageenan-induced inflammation, compds. IV and VI considerably inhibited edema growth.  
 IT 497162-76-2P  
 RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (synthesis and pharmacol. characterization of new acyclonucleoside derivs.)  
 RN 497162-76-2 CAPLUS  
 CN Acetamide, N,N'-[{(6-methyl-2,4-dioxo-1,3(2H,4H)-pyrimidinediy)bis(2-hydroxy-3,1-propanediyl)]bis[2,2-dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B



IT 497162-75-1P

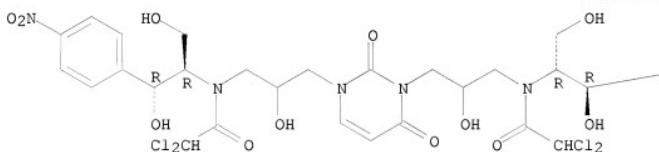
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and pharmacol. characterization of new acyclonucleoside derivs.)

RN 497162-75-1 CAPLUS

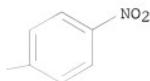
CN Acetamide, N,N'-(2,4-dioxo-1,3(2H,4H)-pyrimidinediy)bis[2,2-dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 13

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 47 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:136067 CAPLUS  
 DN 136:179042

TI Poly(ether-thioether)-, poly(ether-sulfoxide)-, and poly(ether-sulfone) nucleic acids, their synthesis and use in medicine and biochemistry

IN Segev, David

PA Bio-Rad Laboratories, Inc., USA

SO U.S., 46 pp., Cont.-in-part of U.S. Ser. 384,995, abandoned.

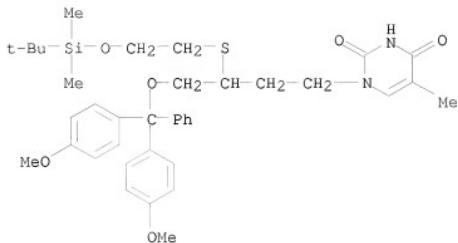
CODEN: USXXAM

DT Patent

LA English

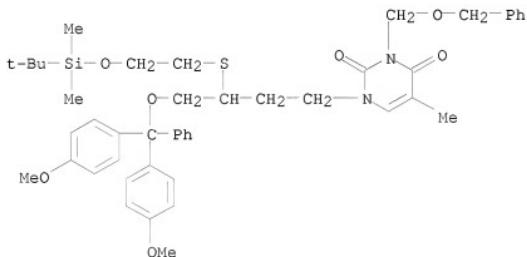
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6348583	B1	20020219	US 1999-411862	19991004
	CA 2382631	A1	20010308	CA 2000-2382631	20000721
	WO 2001016365	A1	20010308	WO 2000-IL432	20000721
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP	1208234	A1	20020529	EP 2000-946256	20000721
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003508062	T	20030304	JP 2001-529910	20000721
	AU 769619	B2	20040129	AU 2000-60126	20000721
PRAI	US 1999-384995	B2	19990830		
	US 1999-411862	A	19991004		
	WO 2000-IL432	W	20000721		
AB	A compound comprising a poly(ether-thioether), poly(ether-sulfoxide) or poly(ether-sulfone) backbone bearing a plurality of ligands that are individually bound to chiral carbon atoms located within the backbone, at least one of the ligands including a moiety such as a naturally occurring nucleobase, a nucleobase binding group; a process of synthesizing the compound; monomers to be used in this process and their synthesis; and processes for using the compound in biochem. (e.g., in hybridization) and medicine (e.g., as pharmaceuticals to treat diseases or viral infections) are disclosed.				
IT	328409-86-5P	328409-87-6P	328409-88-7P		
	328409-89-8P	328409-90-1P			
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
	(poly(ether-thioether)-, poly(ether-sulfoxide)-, and poly(ether-sulfone) nucleic acids, their synthesis and use in medicine and biochem.)				
RN	328409-86-5	CAPLUS			
CN	2,4(1H,3H)-Pyrimidinedione, 1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[(2-[(1,1-dimethylethyl)silyl]oxyethyl)thio]butyl]-5-methyl- (CA INDEX NAME)				



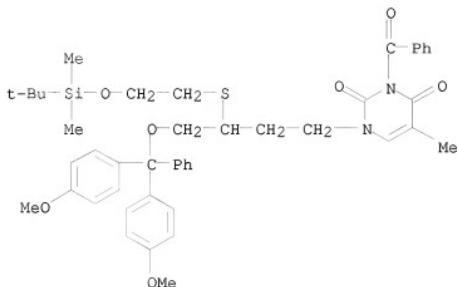
RN 328409-87-6 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]thio]butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)



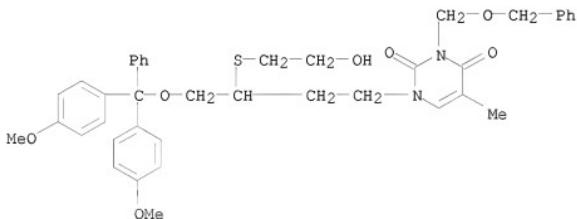
RN 328409-88-7 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]thio]butyl]-5-methyl- (CA INDEX NAME)



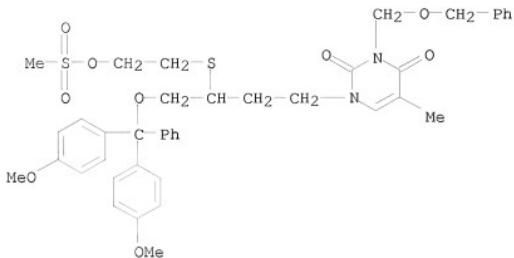
BN 328409-89-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[bis(4-methoxyphenyl)phenylimethoxy]-3-[(2-hydroxyethyl)thio]butyl]-5-methyl-3-[(phenylimethoxy)methyl]- (CA INDEX NAME)



RN 328409-90-1 CAPLUS

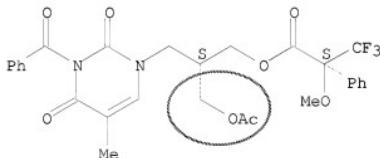
CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[(2-[(methylsulfonyl)oxy]ethyl)thio]butyl]-5-methyl-3-[1(phenylmethoxy)methyl]-  
(CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

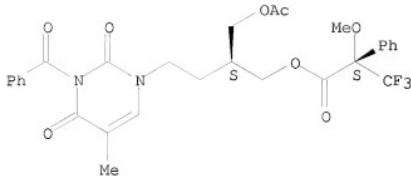
L11 ANSWER 48 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:70720 CAPLUS  
 DN 136:310141  
 TI Chemo-enzymatic synthesis of novel  $\beta$ -amino acids substituted by (thymin-1-yl)methyl functional group at the  $\alpha$ -position  
 AU Yokomatsu, Tsutomu; Takada, Ken; Yasumoto, Akihito; Yuasa, Yoko; Shibuya, Shiroshi  
 CS School of Pharmacy, Tokyo University of Pharmacy and Life Science, Tokyo, 192-0392, Japan  
 SO Heterocycles (2002), 56 (1-2), 545-552  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PB Japan Institute of Heterocyclic Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 136:310141  
 AB A novel  $\beta$ -amino acid having (thymin-1-yl)methyl functionality at the  $\alpha$ -position I (R1 = tert-butoxycarbonyl), a useful component of  $\alpha$ -substituted  $\beta$ -homoolanyl peptide nucleic acids ( $\beta$ 2-PNAs), was synthesized as a protected form from 2-(N3-benzoylthymin-1-yl)methyl-1,3-propanediol via enzymic desymmetrization catalyzed by lipase PS.  
 IT 411235-17-1P 411235-18-2P 411235-19-3P  
 411235-20-6P  
 RL: BPN (Biosynthetic preparation); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (chemo-enzymic synthesis of beta amino acids substituted by thyminylmethyl functional group via lipase-catalyzed resolution)  
 RN 411235-17-1 CAPLUS  
 CN Benzeneacetic acid,  $\alpha$ -methoxy- $\alpha$ -(trifluoromethyl)-, (2S)-2-[(acetoxy)methyl]-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)propyl ester, ( $\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 411235-18-2 CAPLUS  
 CN Benzeneacetic acid,  $\alpha$ -methoxy- $\alpha$ -(trifluoromethyl)-, (2S)-2-[(acetoxy)methyl]-4-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)butyl ester, ( $\alpha$ S)- (CA INDEX NAME)

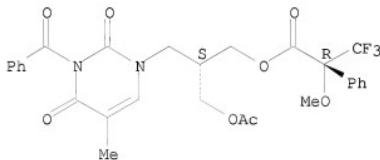
Absolute stereochemistry.



RN 411235-19-3 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -methoxy- $\alpha$ -(trifluoromethyl)-,  
(2S)-2-[(acetoxy)methyl]-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-  
1(2H)-pyrimidinyl)propyl ester, ( $\alpha$ R)- (CA INDEX NAME)

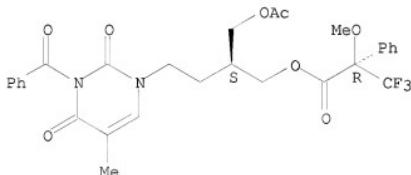
Absolute stereochemistry.



RN 411235-20-6 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -methoxy- $\alpha$ -(trifluoromethyl)-,  
(2S)-2-[(acetoxy)methyl]-4-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-  
1(2H)-pyrimidinyl)butyl ester, ( $\alpha$ R)- (CA INDEX NAME)

Absolute stereochemistry.

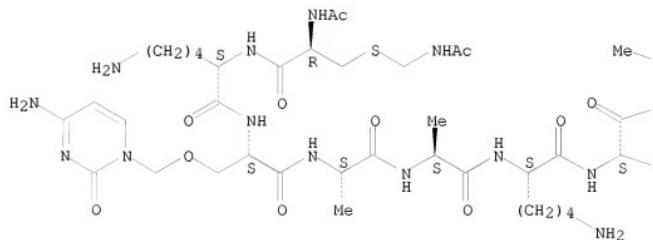


OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

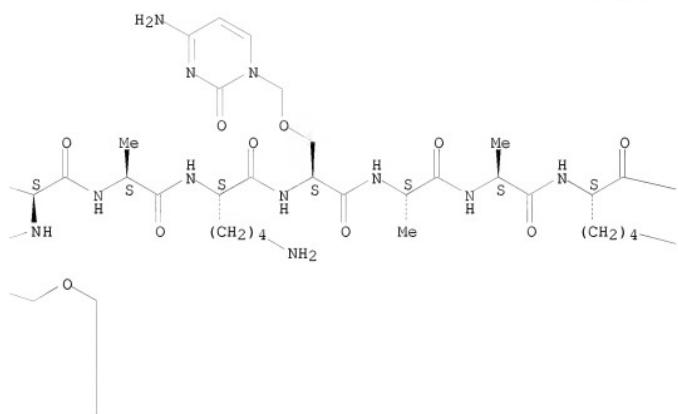
L11 ANSWER 49 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2001:628994 CAPLUS  
 DN 135:354318  
 TI In vitro stability of  $\alpha$ -helical peptide nucleic acids ( $\alpha$ PNAs)  
 AU Garner, P.; Sherry, B.; Moilanen, S.; Huang, Y.  
 CS Department of Chemistry, Case Western Reserve University, Cleveland, OH,  
 44106-7078, USA  
 SO Bioorganic & Medicinal Chemistry Letters (2001), 11(17), 2315-2317  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 AB  $\alpha$ -Helical peptide nucleic acids ( $\alpha$ PNAs) are synthetic mols. that merge the  $\alpha$ -helix secondary structure of peptides with the codified Watson-Crick base pairing capability of nucleic acids. It is now demonstrated that  $\alpha$ PNAs made up of either L- or D-amino acids are resistant to degradation by the proteases present in human serum. The increased stability of  $\alpha$ PNAs towards proteases may be attributable to the presence of unnatural nucleoamino acid residues [-NHCH(CH<sub>2</sub>OCH<sub>2</sub>B)CO-, where B = thymine or cytosine] since the replacement of these amino acids by serine yields a control peptide that does break down in human serum. The stability of  $\alpha$ PNAs towards proteases makes them attractive candidates for further development as antisense agents.  
 IT 267241-35-0 373391-76-5  
 RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)  
 (increased stability of  $\alpha$ -helical PNAs toward serum proteases may be due to presence of unnatural amino acid residues containing T or C)  
 RN 267241-35-0 CAPLUS  
 CN L-Lysinamide, N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-serylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

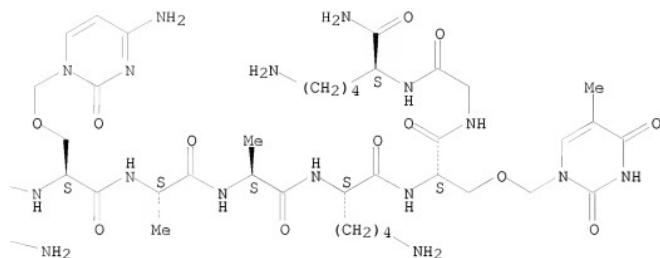
PAGE 1-A



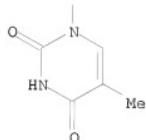
PAGE 1-B



PAGE 1-C



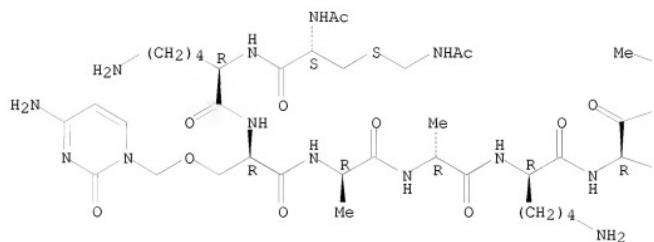
PAGE 2-B



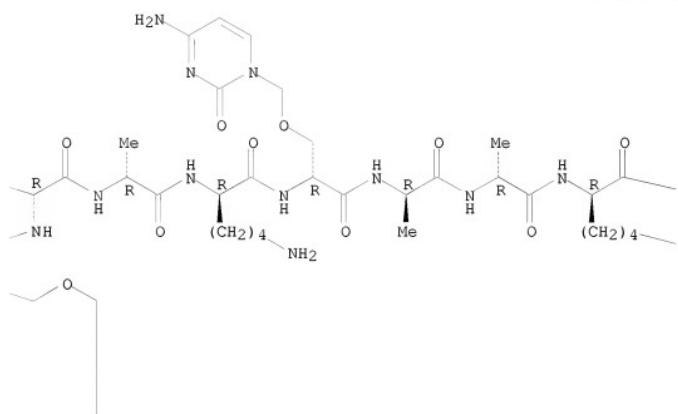
RN 373391-76-5 CAPLUS  
 CN D-Lysinamide, N-acetyl-S-[(acetylamino)methyl]-D-cysteinyl-D-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-D-seryl-D-alanyl-D-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-D-seryl-D-alanyl-D-alanyl-D-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-D-seryl-D-alanyl-D-alanyl-D-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-D-seryl-D-alanyl-D-alanyl-D-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-D-serylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

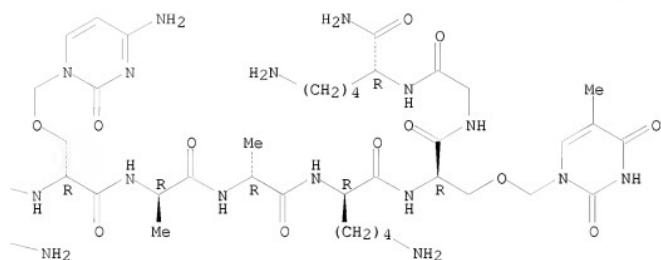
PAGE 1-A



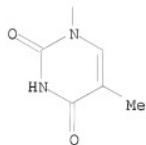
PAGE 1-B



PAGE 1-C



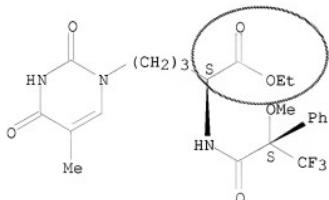
PAGE 2-B



OSC.G 8        THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)  
 RE.CNT 13      THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

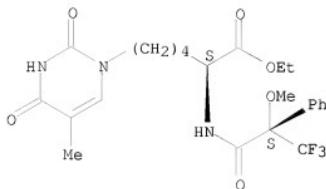
L11 ANSWER 50 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2001:537236 CAPLUS  
 DN 135:318349  
 TI Synthesis by conjugate radical addition of new heterocyclic amino acids with nucleobase side chains  
 AU Jones, R. C. F.; Berthelot, D. J. C.; Iley, J. N.  
 CS Department of Chemistry, The Open University, Milton Keynes, MK7 6AA, UK  
 SO Tetrahedron (2001), 57(30), 6539-6555  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 135:318349  
 AB N-(2-iodoethyl) and N-(3-iodopropyl)pyrimidines and purines undergo stereoselective conjugate radical addition with an optically active oxazolidinone acceptor to give syn-adducts that can be converted into amino acids carrying pyrimidine and purine (nucleobase) side chains.  
 IT 367493-22-9P 367493-23-0P 367493-24-1P  
 367493-25-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis by conjugate radical addition of new heterocyclic amino acids with nucleobase side chains)  
 RN 367493-22-9 CAPLUS  
 CN 1(2H)-Pyrimidinepentanoic acid, 3,4-dihydro-5-methyl-2,4-dioxo- $\alpha$ -[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2-phenylpropyl]amino]-, ethyl ester, ( $\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 367493-23-0 CAPLUS  
 CN 1(2H)-Pyrimidinehexanoic acid, 3,4-dihydro-5-methyl-2,4-dioxo- $\alpha$ -[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2-phenylpropyl]amino]-, ethyl ester, ( $\alpha$ S)- (CA INDEX NAME)

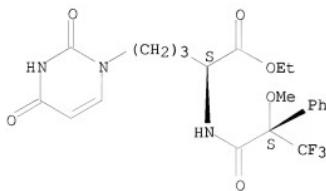
Absolute stereochemistry.



RN 367493-24-1 CAPLUS

CN 1(2H)-Pyrimidinepentanoic acid, 3,4-dihydro-2,4-dioxo-a-[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2-phenylpropyl]amino]-, ethyl ester, (aS)- (CA INDEX NAME)

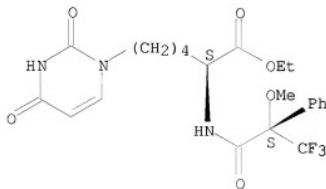
Absolute stereochemistry.



RN 367493-25-2 CAPLUS

CN 1(2H)-Pyrimidinehexanoic acid, 3,4-dihydro-2,4-dioxo-a-[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2-phenylpropyl]amino]-, ethyl ester, (aS)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)  
 RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

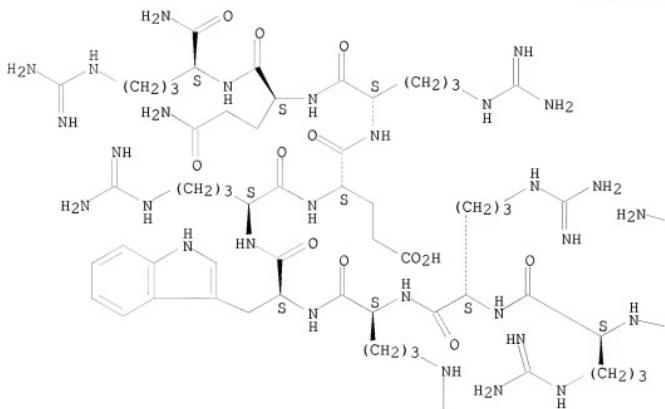


=> d 111 51-121 bib,ab,hitstr

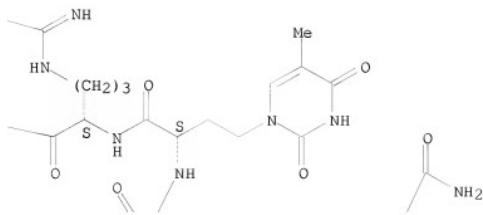
L11 ANSWER 51 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2001:314443 CAPLUS  
 DN 135:122727  
 TI Construction of peptides with nucleobase amino acids. Design and synthesis of the nucleobase-conjugated peptides derived from HIV-1 rev and their binding properties to HIV-1 RRE RNA  
 AU Takahashi, T.; Hamasaki, K.; Ueno, A.; Mihara, H.  
 CS Graduate School of Bioscience and Biotechnology, Department of Bioengineering, Tokyo Institute of Technology, Nagatsuta, Midori-Ku, Yokohama, 226-8501, Japan  
 SO Bioorganic & Medicinal Chemistry (2001), 9(4), 991-1000  
 CODEN: BMECEP; ISSN: 0968-0896  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 135:122727  
 AB In order to develop a novel mol. that recognizes a specific structure of RNA, we have attempted to design peptides having L- $\alpha$ -amino acids with a nucleobase at the side chain (nucleobase amino acid (NBA)), expecting that the function of a nucleobase which can specifically recognize a base in RNA is regulated in a peptide conformation. In this study, to demonstrate the applicability of the NBA units in the peptide to RNA recognition, the authors designed and synthesized a variety of NBA-conjugated peptides, derived from HIV-1 Rev. CD study revealed that the conjugation of the Rev peptide with an NBA unit did not disturb the peptide conformation. RNA-binding affinities of the designed peptides with RRE IIB RNA were dependent on the structure of the nucleobase moieties in the peptides. The peptide having the cytosine NBA at the position of the Asn40 site in the Rev showed a higher binding ability for RRE IIB RNA, despite the diminishing the Asn40 function. Furthermore, the peptide having the guanine NBA at the position of the Arg44 site, which is the most important residue for the RNA binding in the Rev, bound to RRE IIB RNA in an ability similar to Rev34-50 with native sequence. These results demonstrate that an appropriate NBA unit in the peptide plays an important role in the RNA binding with a specific contact such as hydrogen bonding, and the interaction between the nucleobase in the peptide and the base in the RNA can enhance the RNA-binding affinity and specificity.  
 IT 350810-90-1 350810-99-0 350811-03-9  
 350811-17-5 350811-21-1 350811-31-3  
 350811-37-9 350811-70-0  
 RL: PRP (Properties)  
 (design and synthesis of the nucleobase-conjugated peptides derived from HIV-1 rev and their binding properties to HIV-1 RRE RNA)  
 RN 350810-90-1 CAPLUS  
 CN RNA, (G-G-C-U-G-G-U-C-U-G-G-G-C-G-C-A-G-C-G-U-C-A-A-U-G-A-C-G-C-U-G-A-C-G-G-U-A-C-A-G-G-C-C-A-G-C-C), compd. with N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-L-glutaminyl-L-alanyl-L-arginyl-L-arginyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-L-argininamide (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 350486-52-1  
 CMF C106 H183 N53 O27

### Absolute stereochemistry.

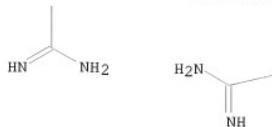
PAGE 1-A



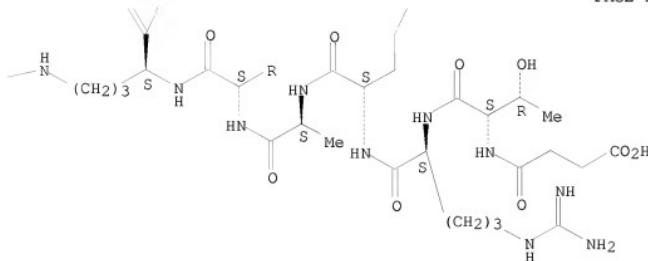
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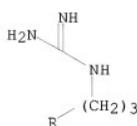
PAGE 2-A



PAGE 2-B



PAGE 3-A



CM 2

CRN 266988-79-8  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 RN 350810-99-0 CAPLUS  
 CN RNA, (G-G-C-U-G-G-U-C-U-G-G-C-G-C-A-G-C-G-U-C-A-A-U-G-A-C-G-C-U-G-A-C-G-G-U-A-C-A-G-C-C-A-G-C-C), compd. with  
 N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-(aS)-a-amino  
 -3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-alanyl-L-  
 arginyl-L-arginyl-L-asparaginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-

tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-L-argininamide (1:1) (9CI) (CA INDEX NAME)

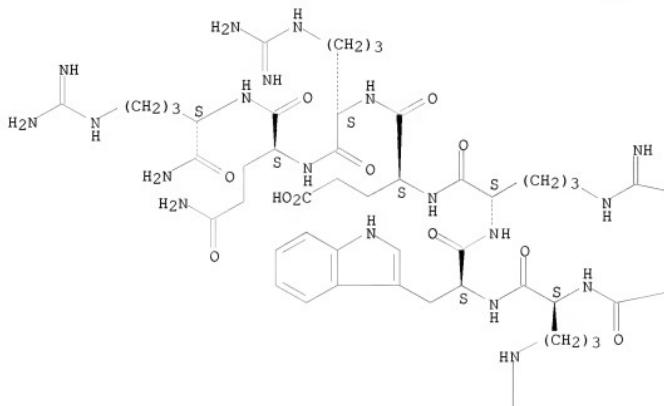
CM 1

CRN 350486-59-8

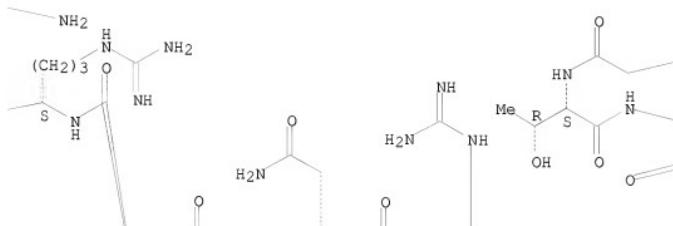
CMF C105 H181 N53 O27

Absolute stereochemistry.

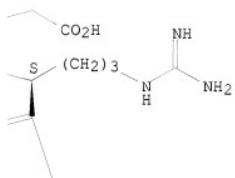
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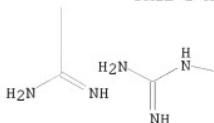
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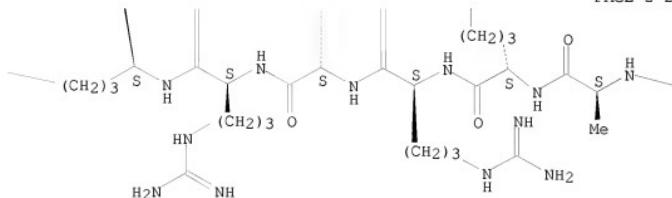
PAGE 1-C



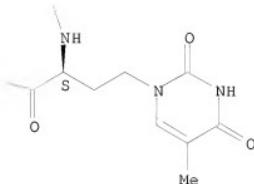
PAGE 2-A



PAGE 2-B



PAGE 2-C



CM 2

CRN 266988-79-8  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 RN 350811-03-9 CAPLUS  
 CN RNA, (G-G-C-U-G-G-U-C-U-G-G-C-G-C-A-G-C-G-U-C-A-A-U-G-A-C-G-C-U-G-A-C-G-G-U-A-C-A-G-G-C-C-A-G-C-C), compd. with  
 N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoyl-L-alanyl-L-arginyl-L-arginyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-arginyl-L-arginyl-L-arginyl-L-tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-L-argininamide (1:1)

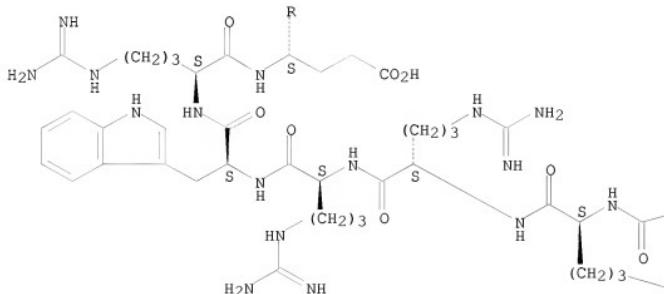
(9CI) (CA INDEX NAME)

CM 1

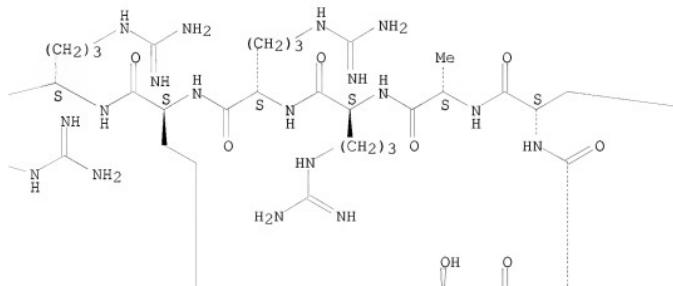
CRN 350486-63-4  
CMF C109 H185 N55 O27

Absolute stereochemistry.

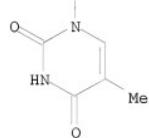
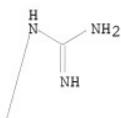
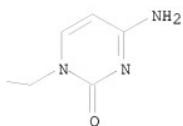
PAGE 1-A



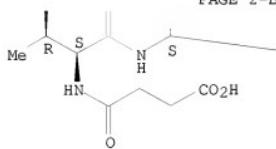
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PAGE 1-C

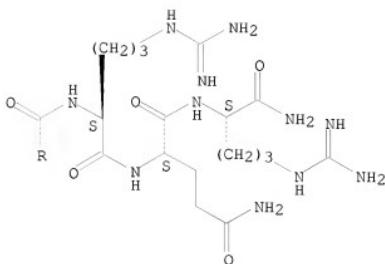


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PAGE 2-C





CM 2

CRN 266988-79-8

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 350811-17-5 CAPLUS

CN RNA, (G-G-C-U-G-G-U-C-U-G-G-A-C-G-C-A-G-C-G-U-C-A-U-G-A-C-G-C-U-G-A-C-G-G-U-A-C-A-G-G-C-C-A-G-C-C), compd. with  
 N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoyl-L-alanyl-L-arginyl-L-arginyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-L-argininamide (1:1)  
 (9CI) (CA INDEX NAME)

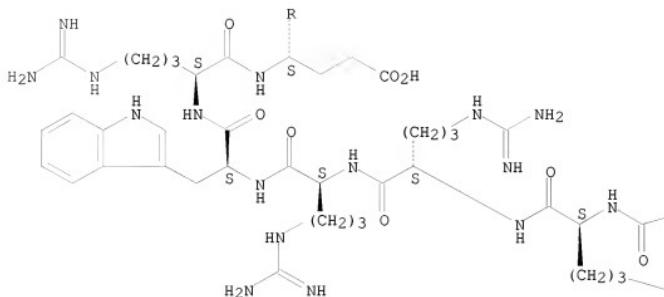
CM 1

CRN 350486-63-4

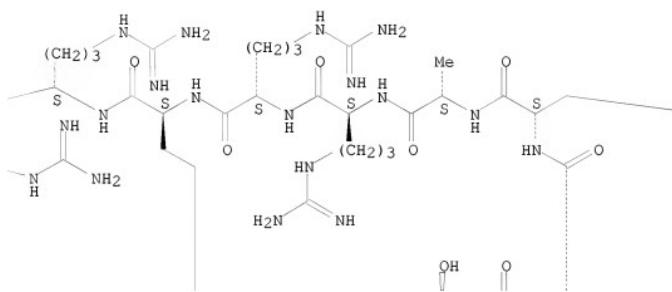
CMF C109 H185 N55 O27

Absolute stereochemistry.

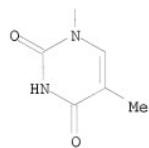
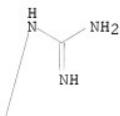
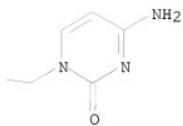
PAGE 1-A



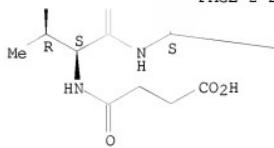
PAGE 1-B



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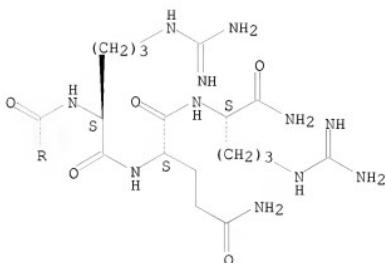


PAGE 2-B



PAGE 2-C





CM 2

CRN 271756-46-8  
 CMF Unspecified  
 CCI MAN

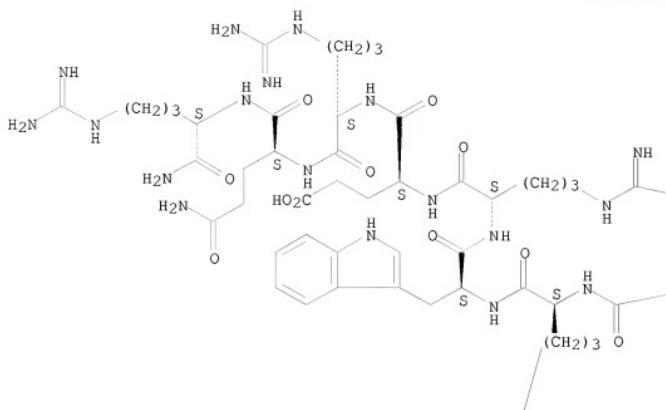
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 RN 350811-21-1 CAPLUS  
 CN RNA, (G-G-C-U-G-G-U-C-U-G-G-C-G-C-A-G-C-G-U-C-A-U-G-A-C-G-C-U-G-A-C-G-G-U-A-C-A-G-G-C-C-A-G-C-C), compd. with  
 N-(3-carboxy-1-oxopropyl)-L-threonyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-glutaminyl-L-alanyl-L-arginyl-L-arginyl-L-asparaginyl-L-arginyl-L-arginyl-L-arginyl-L-tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-L-argininamide (1:1) (9CI) (CA INDEX NAME)

CM 1

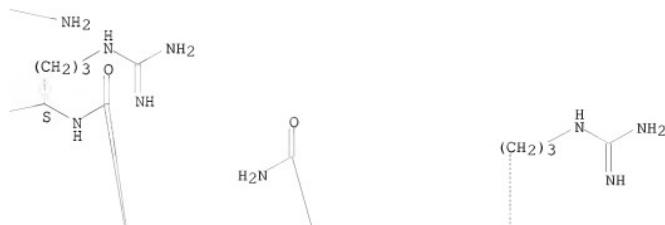
CRN 350486-71-4  
 CMF C104 H177 N51 O28

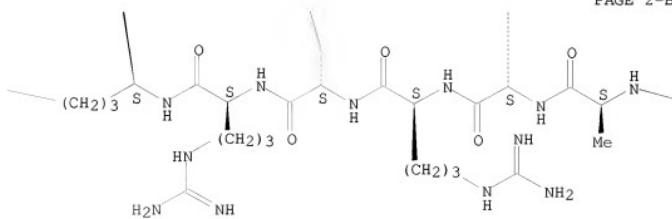
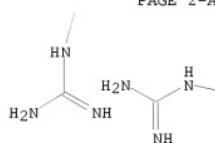
Absolute stereochemistry.

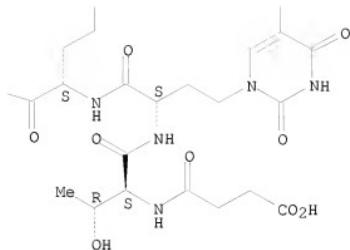
PAGE 1-A



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CM 2

CRN 266988-79-8

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 350811-31-3 CAPLUS

CN RNA, (G-G-C-U-G-G-U-C-U-G-G-G-C-G-C-A-G-C-G-U-C-A-A-U-G-A-C-G-C-U-G-A-C-G-G-U-A-C-A-G-G-C-C-A-G-C-C), compd. with  
 N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-L-glutaminyl-L-alanyl-L-  
 arginyl-(aS)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-  
 pyrimidinebutanoyl-L-asparaginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-  
 tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-L-  
 argininamide (1:1) (9CI) (CA INDEX NAME)

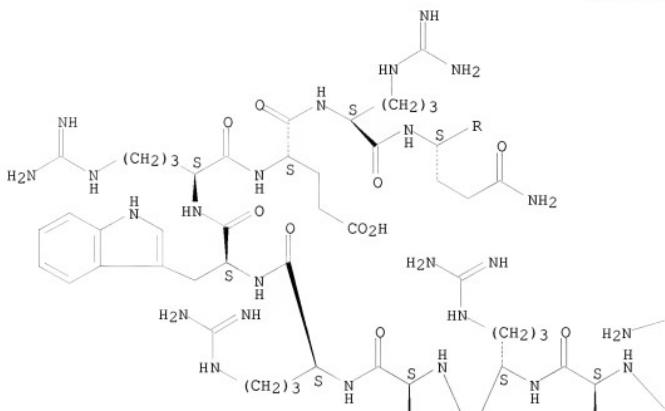
CM 1

CRN 350486-81-6

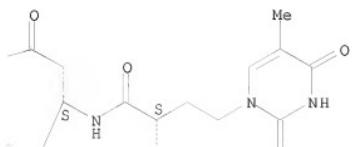
CMF C104 H177 N51 O28

Absolute stereochemistry.

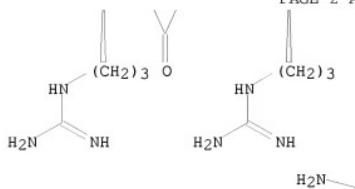
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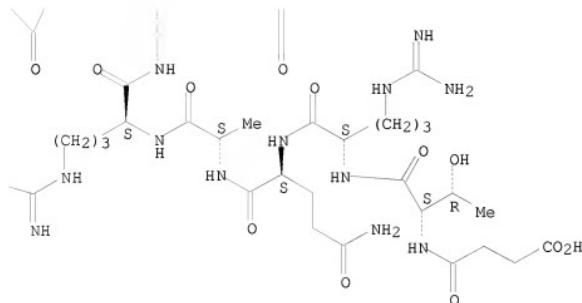
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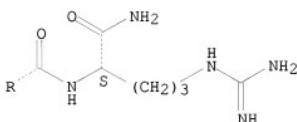
PAGE 2-A



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CM 2

CRN 266988-79-8  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 RN 350811-37-9 CAPLUS  
 CN RNA, (G-G-C-U-G-G-U-C-U-G-G-C-G-C-A-G-C-G-U-C-A-A-U-G-A-C-G-C-U-G-A-C-G-

G-U-A-C-A-G-G-C-C-A-G-C-C), compd. with  
 N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-L-glutaminyl-L-alanyl-L-  
 arginyl-L-arginyl-L-asparaginyl-L-arginyl-L-arginyl-L-arginyl-( $\alpha$ S)-  
 $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-  
 tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-L-  
 argininamide (1:l) (9CI) (CA INDEX NAME)

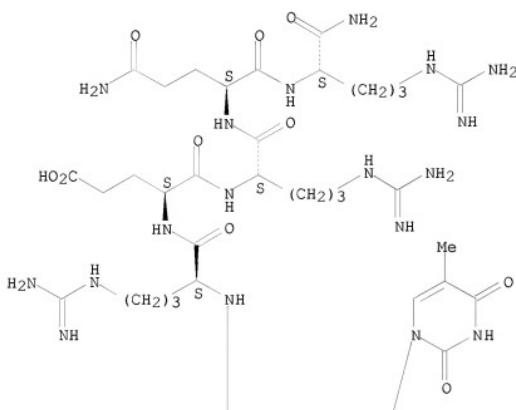
CM 1

CRN 350486-91-8

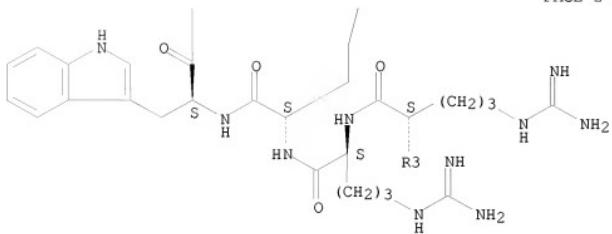
CMF C104 H177 N51 O28

Absolute stereochemistry.

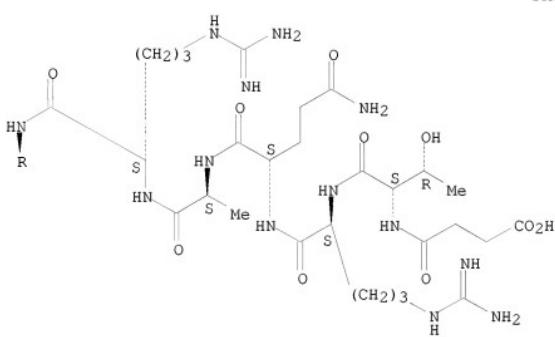
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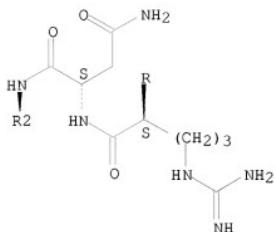
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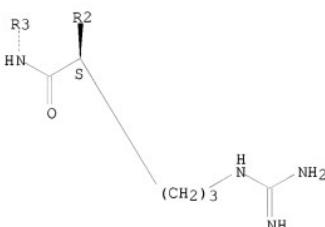
PAGE 3-A



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PAGE 5-A



CM 2

CRN 266988-79-8  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 350811-70-0 CAPLUS  
 CN RNA, (G-G-C-U-G-G-U-C-U-C-G-G-C-G-C-A-G-C-G-U-C-A-A-U-G-A-C-G-C-U-G-A-C-G-G-U-A-G-A-G-G-C-C-A-G-C-C), compd. with  
 N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-L-glutaminyl-L-alanyl-L-arginyl-L-arginyl-L-asparaginyl-L-arginyl-L-arginyl-(uS)-  
 α-amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-tryptophyl-L-arginyl-L-α-glutamyl-L-arginyl-L-glutaminyl-L-argininamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 350729-82-7  
 CMF Unspecified

CCI MAN

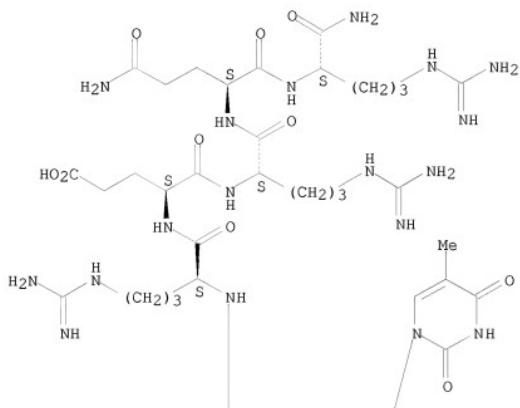
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

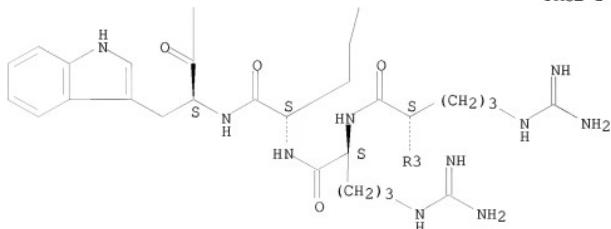
CRN 350486-91-8  
CME C104 H177 N51 O28

Absolute stereochemistry.

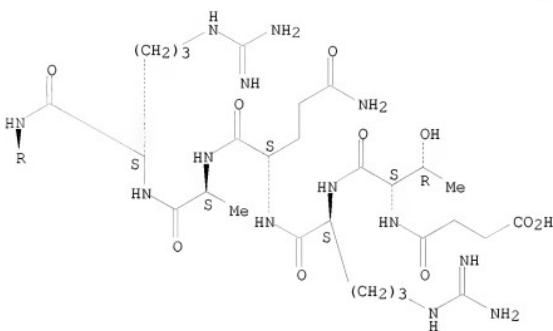
PAGE 1-A



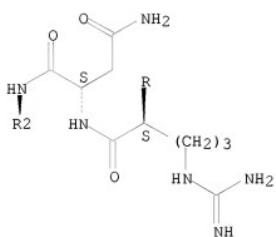
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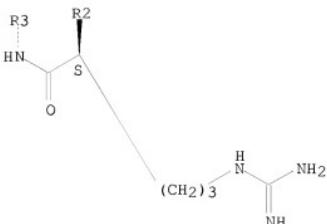
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IT 350486-52-1P 350486-59-8P 350486-63-4P  
350486-71-4P 350486-81-6P 350486-91-8P

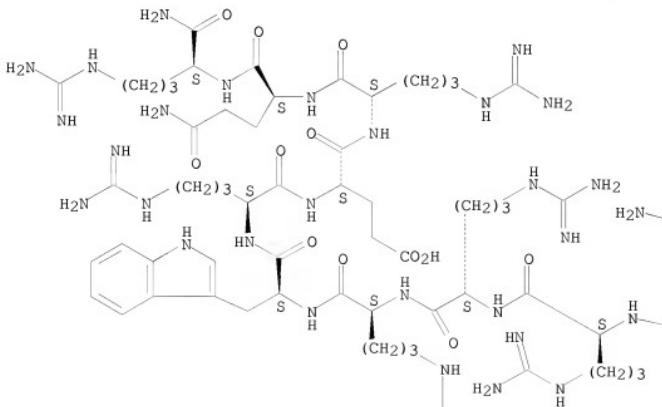
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (design and synthesis of the nucleobase-conjugated peptides derived  
 from HIV-1 rev and their binding properties to HIV-1 RRE RNA)

RN 350486-52-1 CAPLUS

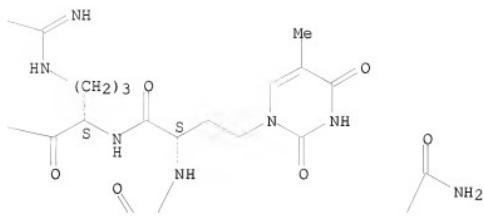
CN L-Argininamide, N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-L-glutaminyl-L-alanyl-L-arginyl-L-arginyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-arginyl-L-arginyl-L-arginyl-L-tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-(9CI) (CA INDEX NAME)

## Absolute stereochemistry.

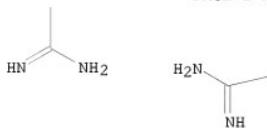
PAGE 1-A



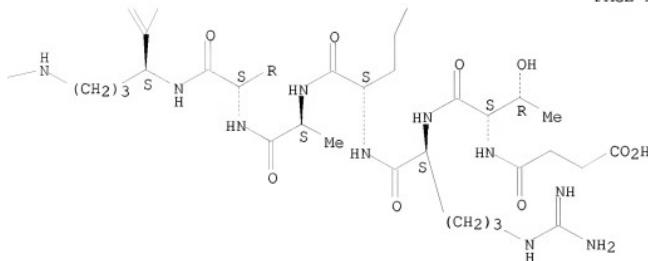
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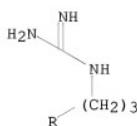
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PAGE 2-B



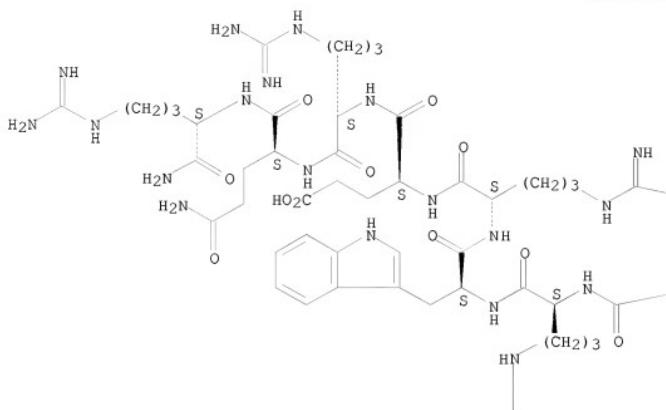
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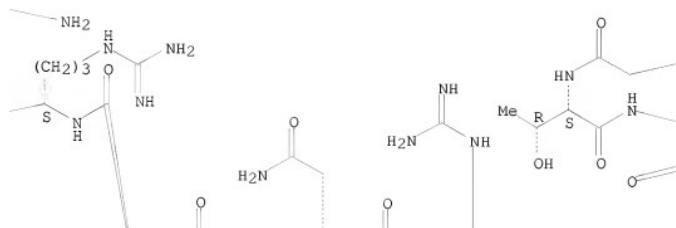
RN 350486-59-8 CAPLUS  
 CN L-Argininamide, N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-( $\alpha$ S)-  
 $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-  
 alanyl-L-arginyl-L-arginyl-L-asparaginyl-L-arginyl-L-arginyl-L-arginyl-L-  
 arginyl-L-tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-  
 (9CI) (CA INDEX NAME)

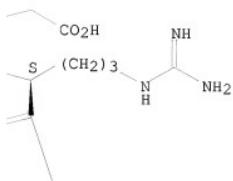
Absolute stereochemistry.

PAGE 1-A

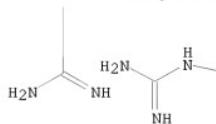


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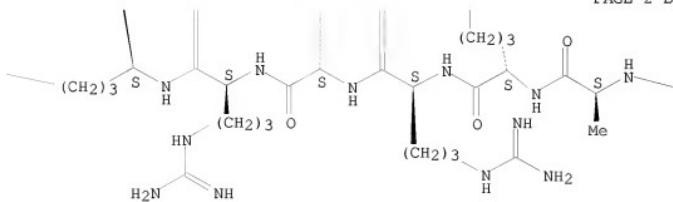




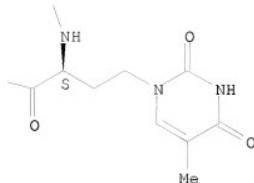
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PAGE 2-B



PAGE 2-C

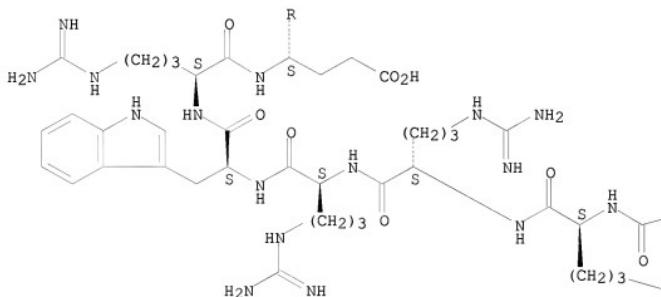


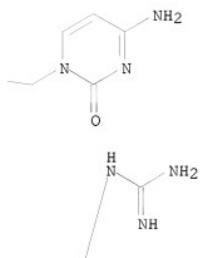
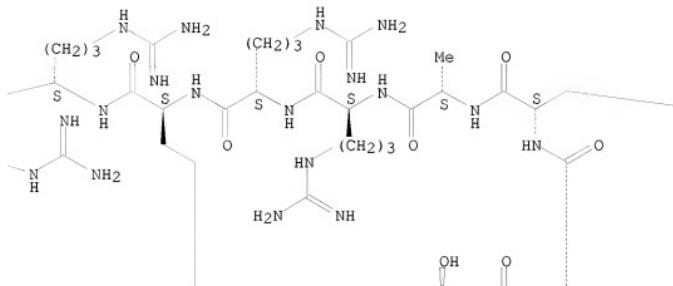
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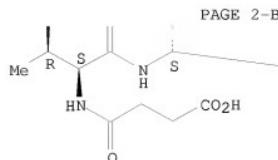
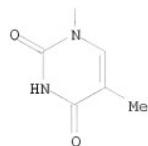
CN L-Argininamide, N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoyl-L-alanyl-L-arginyl-L-  
arginyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-  
pyrimidinebutanoyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-tryptophyl-L-  
arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



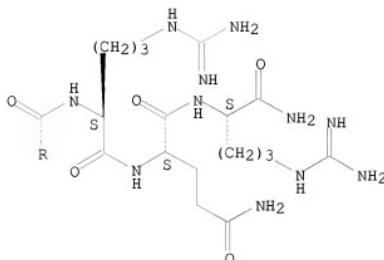




PAGE 2-C



PAGE 3-A

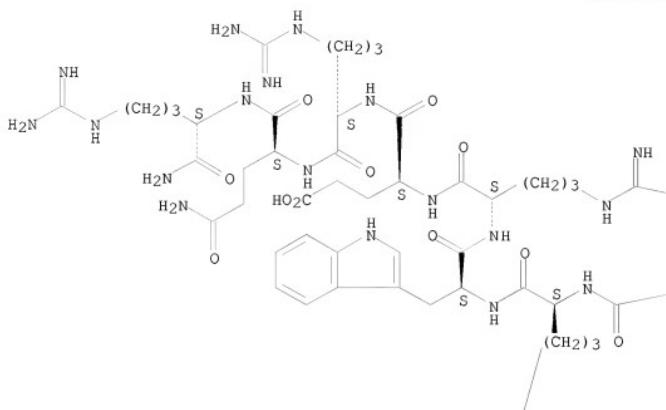


RN 350486-71-4 CAPLUS

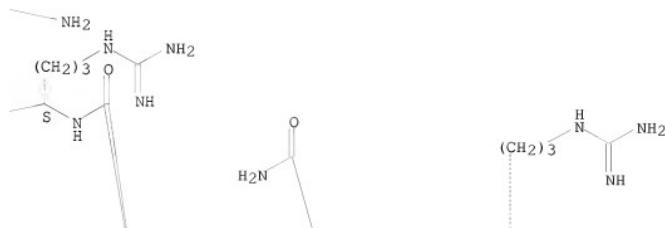
CN L-Argininamide, N-(3-carboxy-1-oxopropyl)-L-threonyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-glutaminyl-L-alanyl-L-arginyl-L-arginyl-L-asparaginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-tryptophanyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl-L-arginyl (9CI) (CA INDEX NAME)

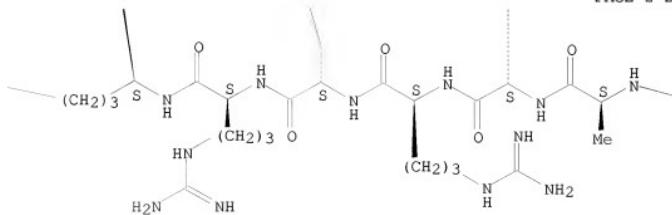
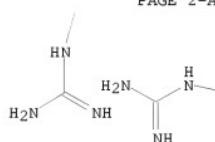
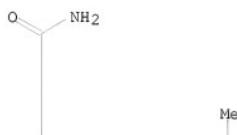
Absolute stereochemistry.

PAGE 1-A

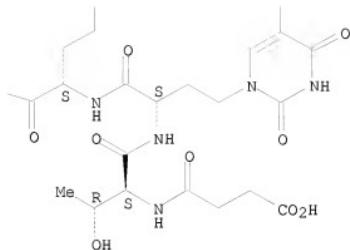


PAGE 1-B





PAGE 2-C

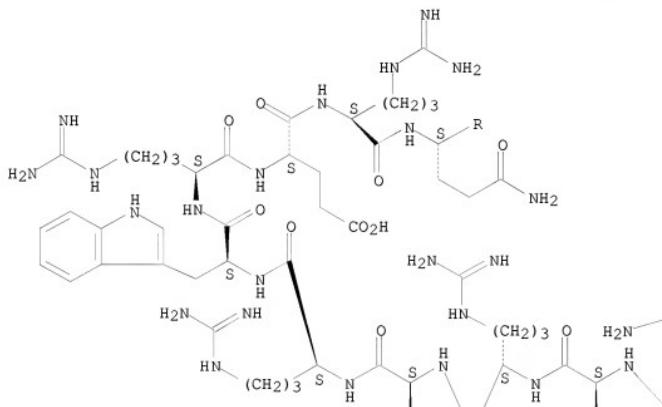


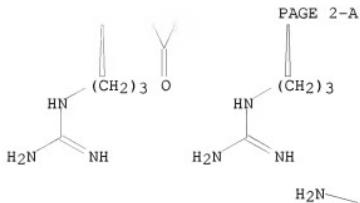
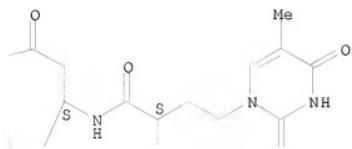
RN 350486-81-6 CAPLUS

CN L-Argininamide, N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-L-glutaminyl-L-alanyl-L-arginyl-( $\alpha\delta$ )- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-asparaginyl-L-arginyl-L-arginyl-L-arginyl-L-tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutaminyl- (9CI) (CA INDEX NAME)

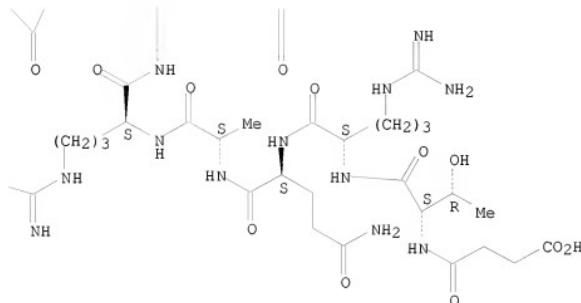
Absolute stereochemistry.

PAGE 1-A

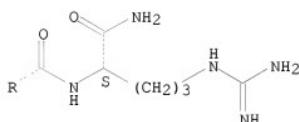




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PAGE 3-A

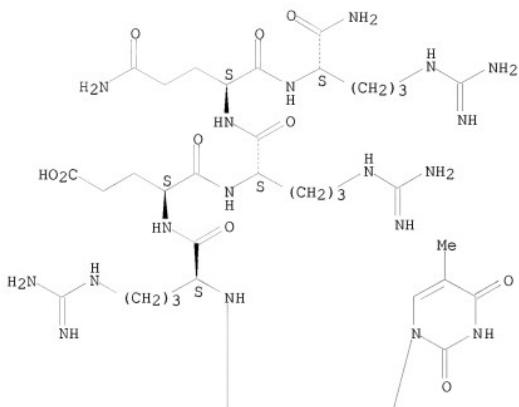


RN 350486-91-8 CAPLUS

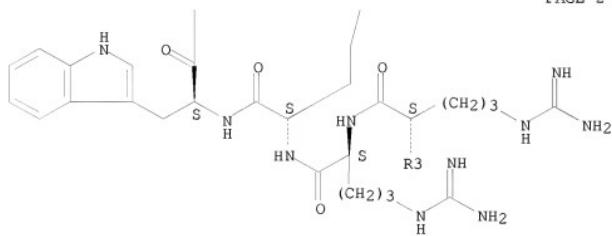
CN L-Argininamide, N-(3-carboxy-1-oxopropyl)-L-threonyl-L-arginyl-L-glutaminyl-L-alanyl-L-arginyl-L-arginyl-L-asparaginyl-L-arginyl-L-arginyl-L-arginyl-L-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-tryptophyl-L-arginyl-L- $\alpha$ -glutamyl-L-arginyl-L-glutamyl-L- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

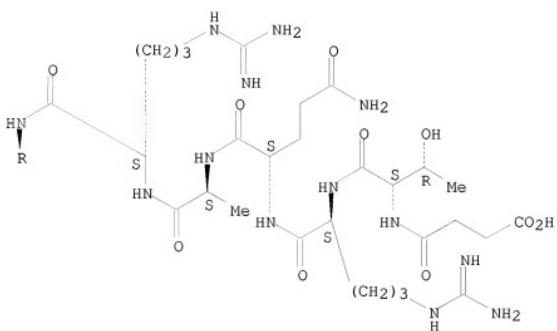
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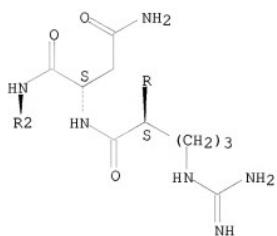
PAGE 2-A

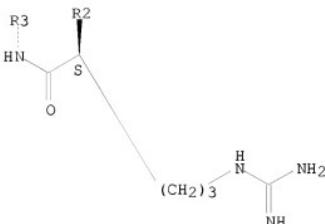


PAGE 3-A



PAGE 4-A





IT 168264-02-6P

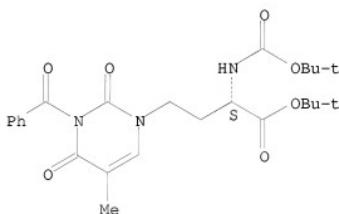
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(design and synthesis of the nucleobase-conjugated peptides derived from HIV-1 rev and their binding properties to HIV-1 RRE RNA)

RN 168264-02-6 CAPLUS

CN 1(2H)-Pyrimidinebutanoic acid, 3-benzoyl- $\alpha$ -[(1,1-dimethylethoxy)carbonyl]amino]-3,4-dihydro-5-methyl-2,4-dioxo-, 1,1-dimethylethyl ester, ( $\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)  
 RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 52 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2001:168182 CAPLUS  
 DN 134:203476

TI Poly(ether-thioether)-, poly(ether-sulfoxide)-, and poly(ether-sulfone) nucleic acids, their synthesis and use in medicine and biochemistry

IN Segev, David

PA Bio-Rad Laboratories, Inc., USA

SO PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001016365	A1	20010308	WO 2000-IL432	20000721
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6348583	B1	20020219	US 1999-411862	19991004
	CA 2382631	A1	20010308	CA 2000-2382631	20000721
	EP 1208234	A1	20020529	EP 2000-946256	20000721
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003508062	T	20030304	JP 2001-520910	20000721
	AU 769619	B2	20040129	AU 2000-60126	20000721
PRAI	US 1999-384995	A	19990830		
	US 1999-411862	A	19991004		
	WO 2000-IL432	W	20000721		

OS MARPAT 134:203476

AB A compound comprising a poly(ether-thioether), poly(ether-sulfoxide) or poly(ether-sulfone) backbone bearing a plurality of ligands that are individually bound to chiral carbon atoms located within the backbone, at least one of the ligands including a moiety such as a naturally occurring nucleobase, a nucleobase binding group; a process of synthesizing the compound; monomers to be used in this process and their synthesis; and processes for using the compound in biochem. (e.g., in hybridization) and medicine (e.g., as pharmaceuticals to treat diseases or viral infections) are disclosed.

IT 328409-86-5P 328409-87-6P 328409-88-7P

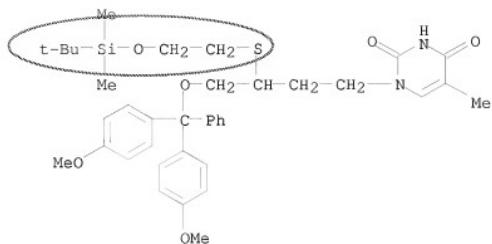
328409-89-8P 328409-90-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(poly(ether-thioether)-, poly(ether-sulfoxide)-, and poly(ether-sulfone) nucleic acids, their synthesis and use in medicine and biochem.)

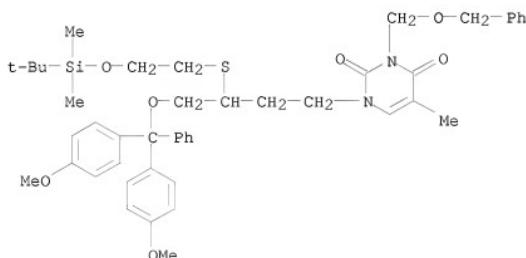
RN 328409-86-5 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[[2-[[1,1-dimethyl ethyl]dimethylsilyl]oxy]ethyl]thio]butyl]-5-methyl- (CA INDEX NAME)



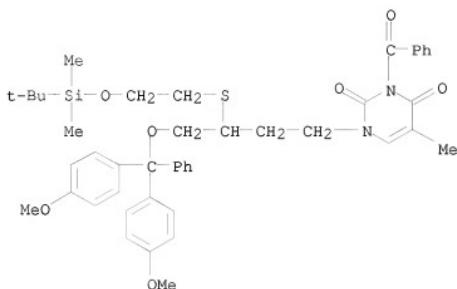
RN 328409-87-6 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]thio]butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)



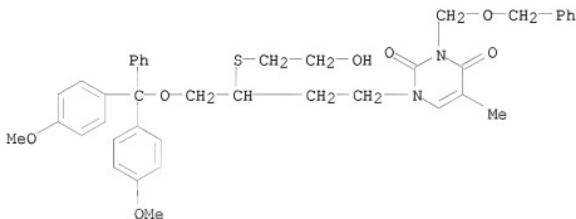
RN 328409-88-7 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-benzoyl-1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]thio]butyl]-5-methyl- (CA INDEX NAME)



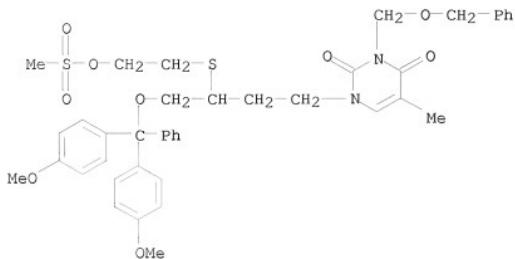
RN 328409-89-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[(2-hydroxyethyl)thio]butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)



RN 328409-90-1 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[4-[bis(4-methoxyphenyl)phenylmethoxy]-3-[[2-[(methylsulfonyloxy)ethyl]thio]butyl]-5-methyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 53 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2001:152703 CAPLUS  
 DN 134:204116  
 TI Alpha-helical peptide nucleic acid, their preparation and diagnostic and therapeutic uses

IN Garner, Philip P.  
 PA USA  
 SO PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001014398	A1	20010301	WO 2000-US21845	20000811
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	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		

US 7183394	B1	20070227	US 2002-110017	20020328
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PRAI US 1999-150637P P 19990825  
 WO 2000-US21845 W 20000811

AB The present invention relates to peptide-based nucleic acid surrogates (PNAs) having a repeating structure of (AAB-aan)m and a particular secondary structure that can bind to particular single-stranded nucleic acid targets. Preferably the peptide-based nucleic acid surrogate has an alpha-helical secondary structure ( $\alpha$ PNA). Also, the present invention relates to the method of forming peptide-based nucleic acid surrogates having a particular secondary structure. The nucleic acid surrogates may be utilized for therapeutic (antisense, antigene), diagnostic (genetic), and mol. switching ( $\alpha$ PNA chips) applications.

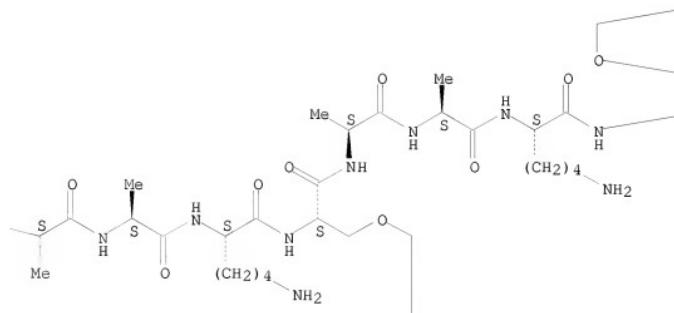
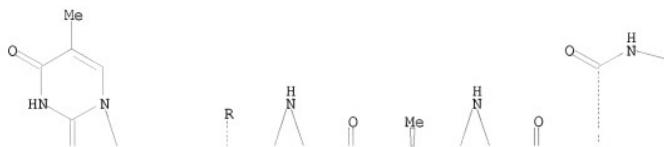
IT 267241-31-6P	267241-34-9P	267241-35-0P
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328081-76-1P	328081-77-2P	328081-78-3P
328081-79-4P	328081-80-7P	328081-81-8P
328081-82-9P		

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
 (alpha-helical peptide nucleic acid, their preparation and diagnostic and therapeutic uses)

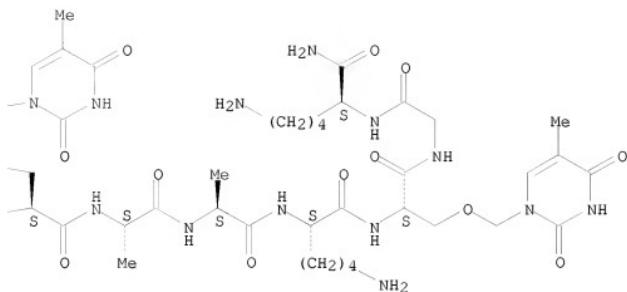
RN 267241-31-6 CAPLUS

CN L-Lysinamide, N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-serylglycyl- (9CI) (CA INDEX NAME)

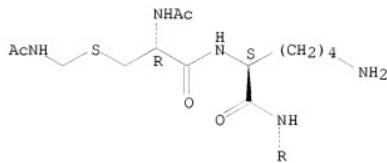
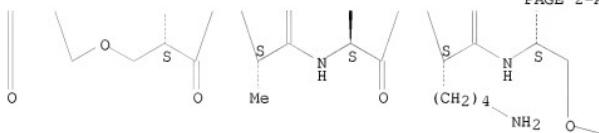
Absolute stereochemistry.



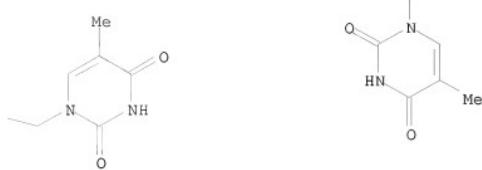
PAGE 1-C



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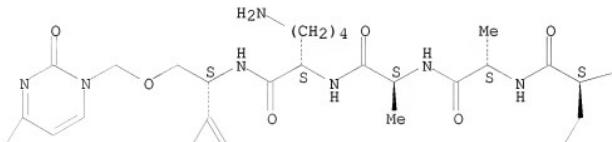


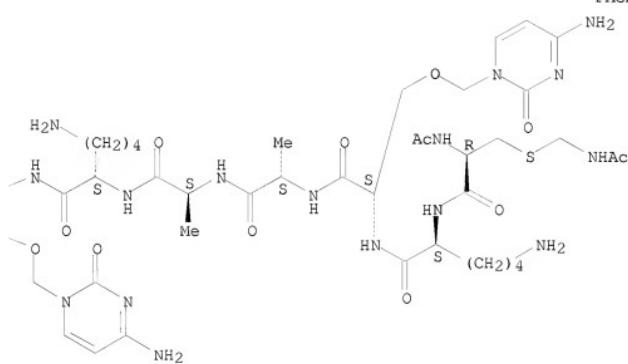
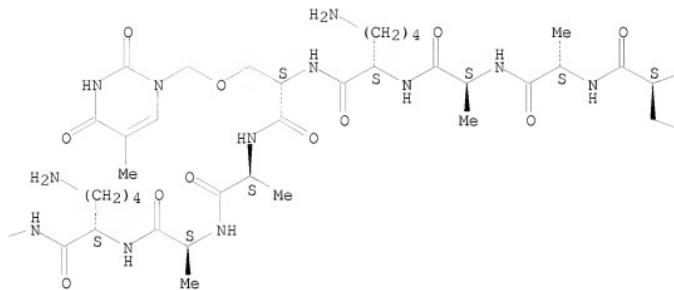
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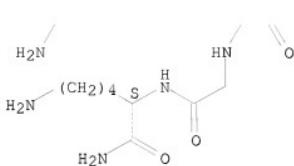
CN L-Lysinamide, N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-lysylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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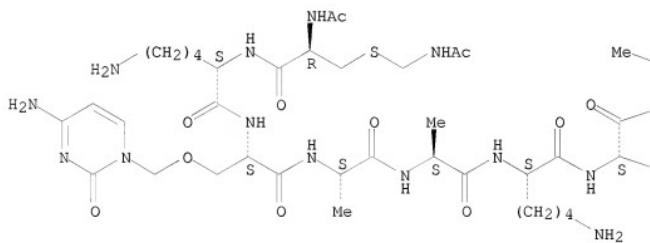


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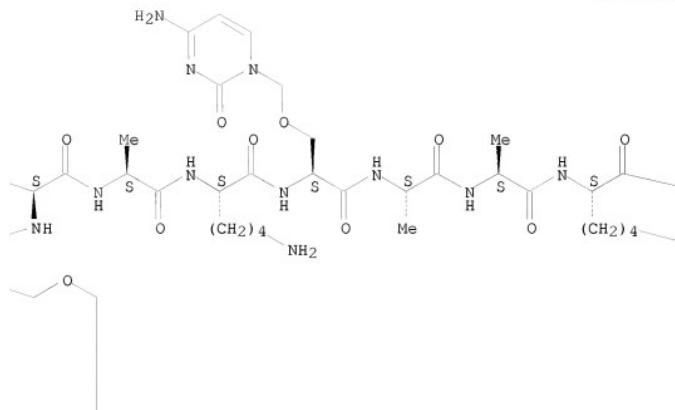
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## Absolute stereochemistry.

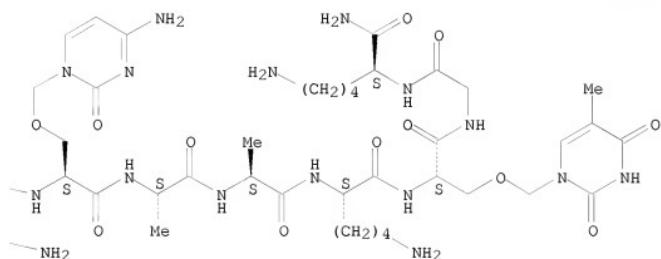
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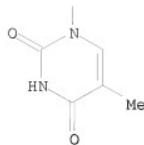
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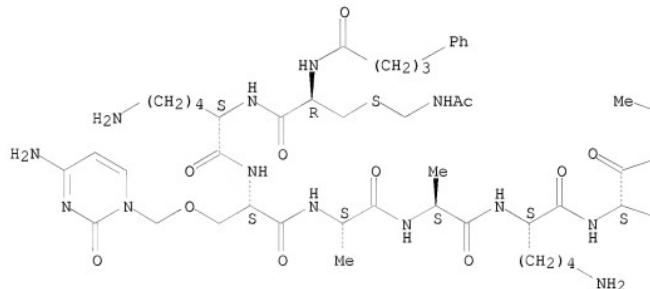
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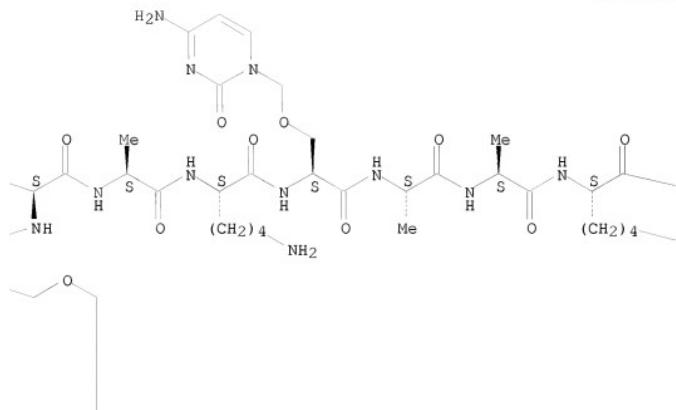
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Absolute stereochemistry.

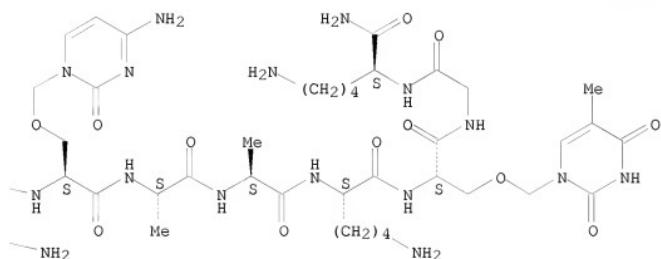
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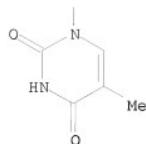
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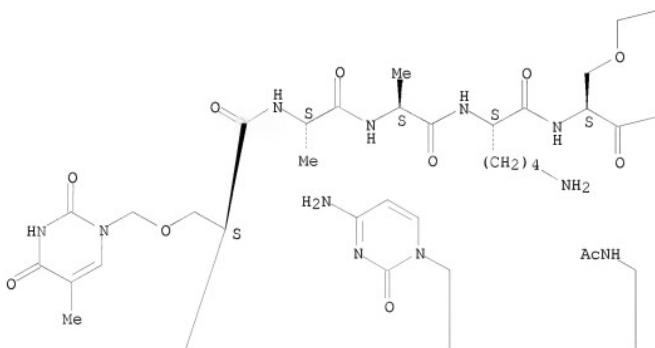
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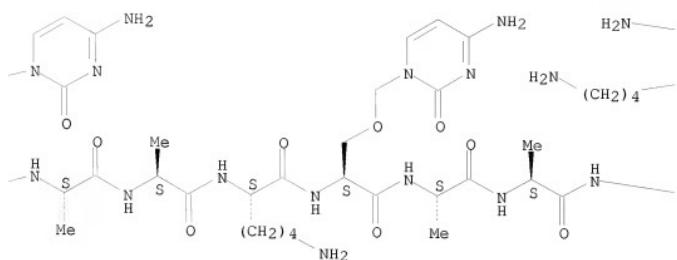
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 (CA INDEX NAME)

Absolute stereochemistry.

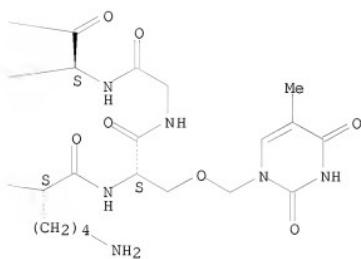
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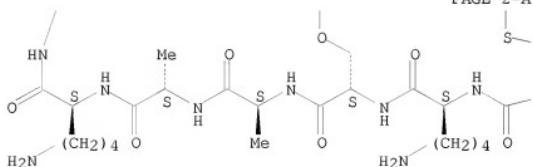
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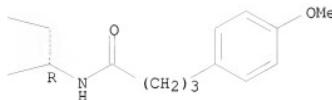
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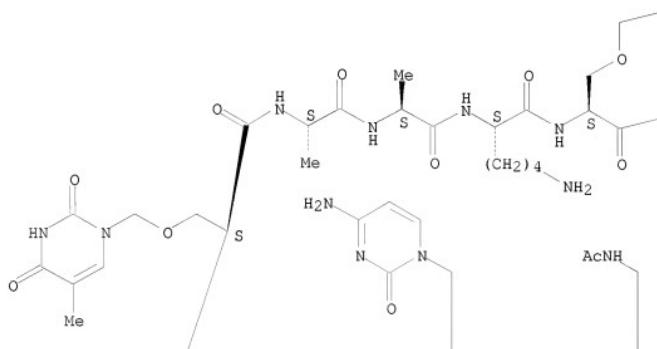
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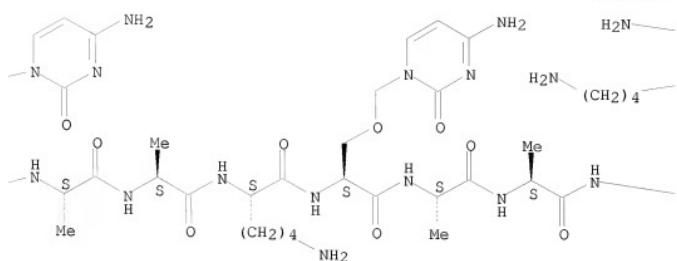
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 (CA INDEX NAME)

Absolute stereochemistry.

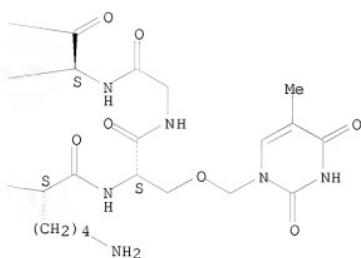
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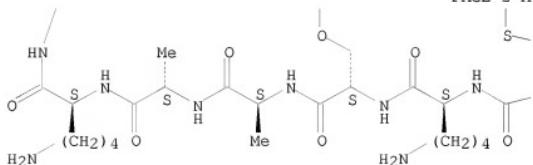
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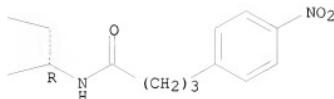
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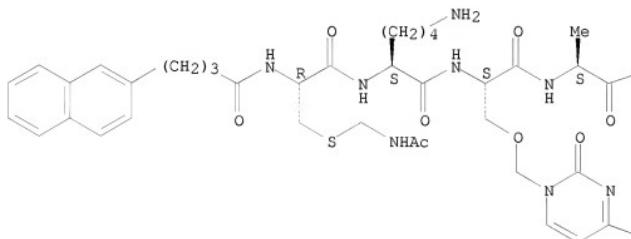
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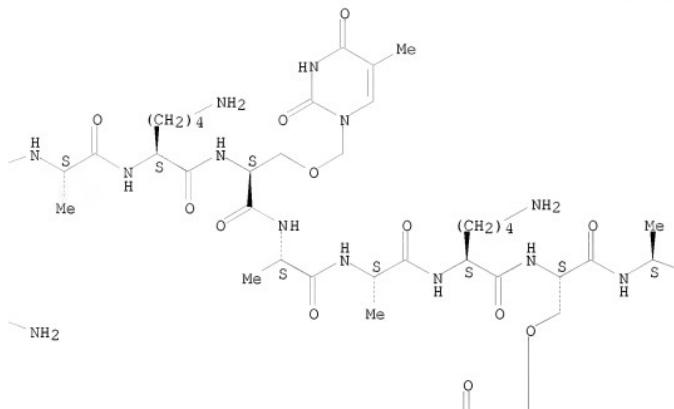
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 (CA INDEX NAME)

Absolute stereochemistry.

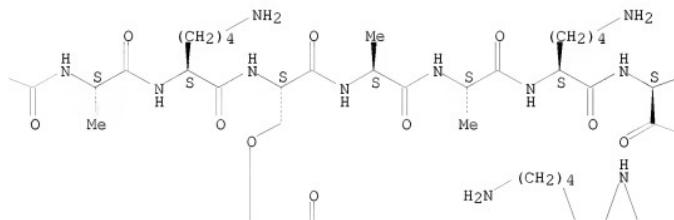
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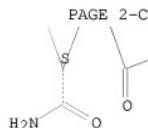
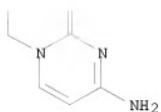
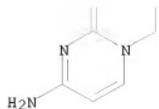
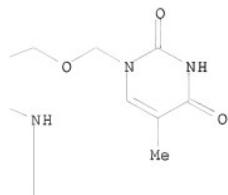


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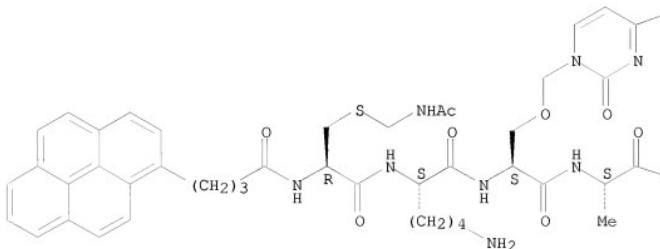


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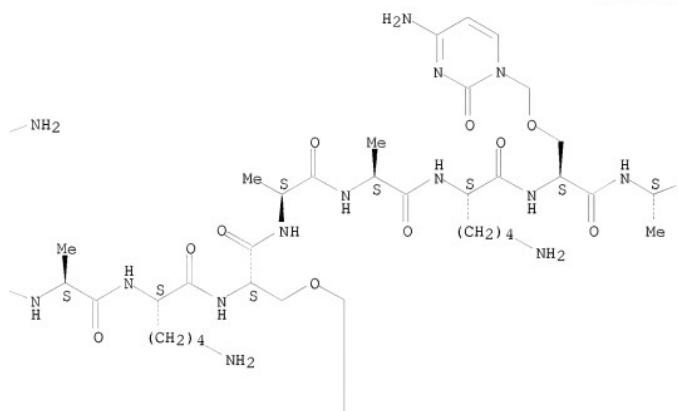
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(CA INDEX NAME)

Absolute stereochemistry.

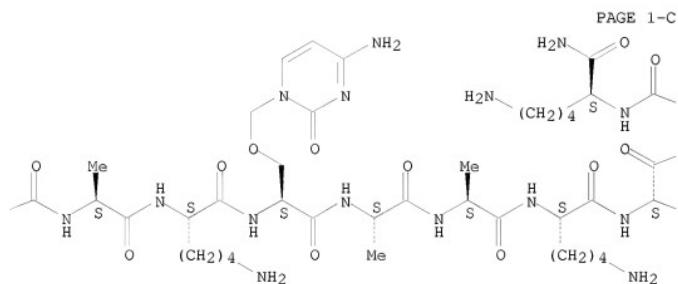
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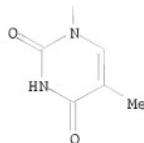
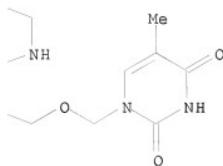


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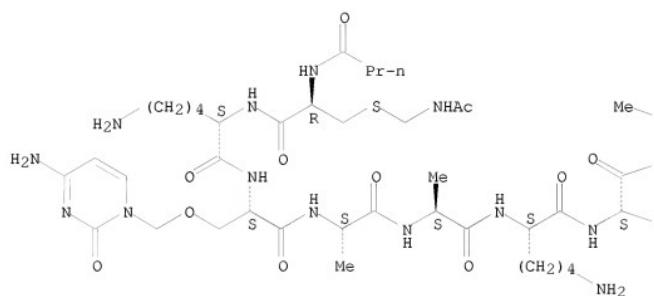




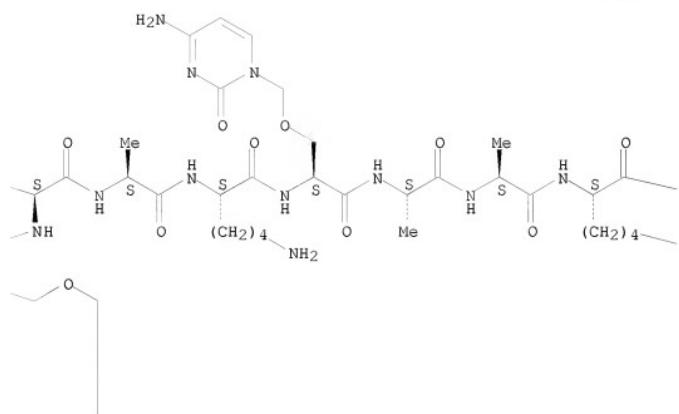
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Absolute stereochemistry.

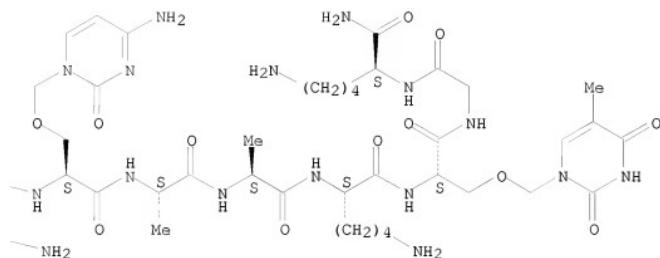
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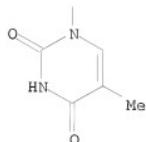
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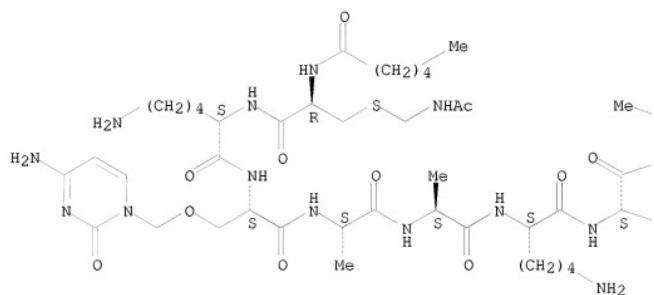
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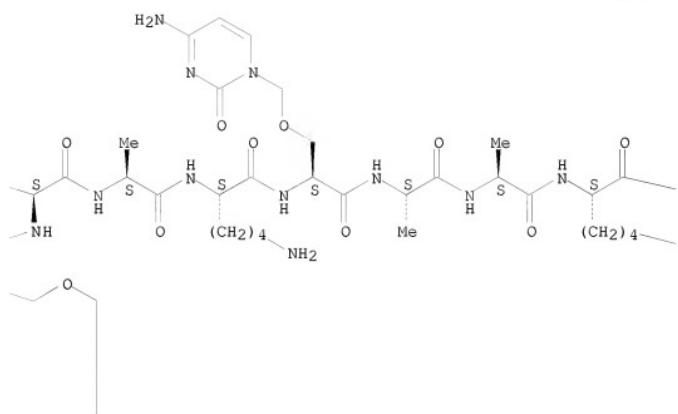
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Absolute stereochemistry.

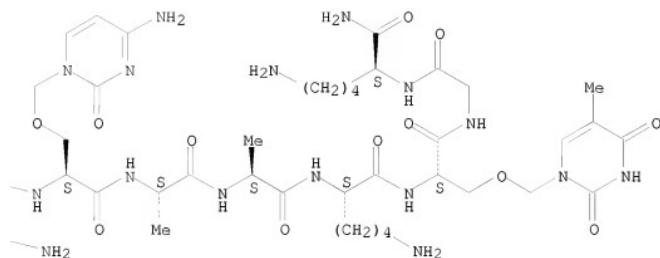
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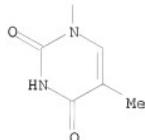
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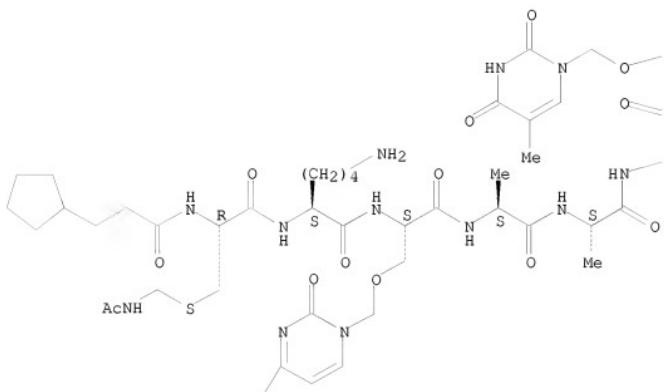
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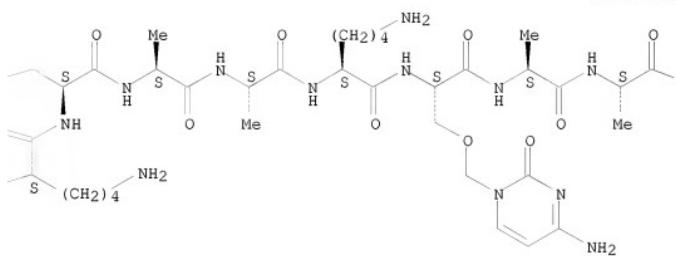
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 (CA INDEX NAME)

Absolute stereochemistry.

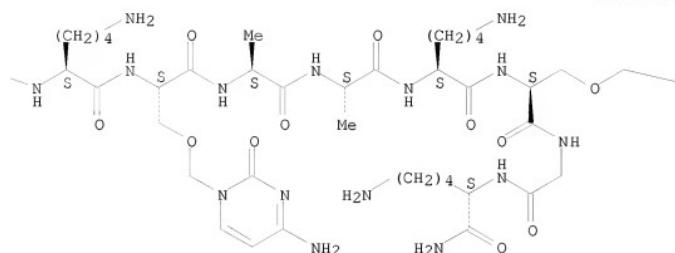
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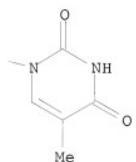
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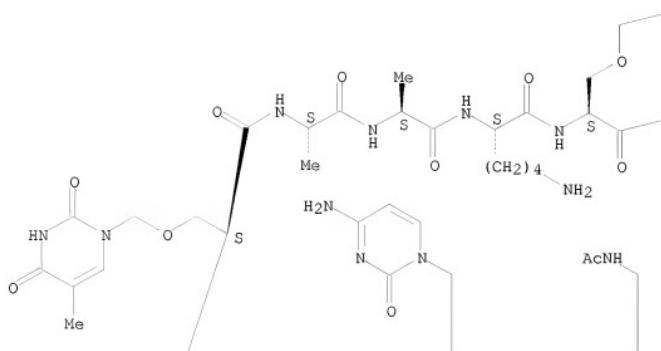
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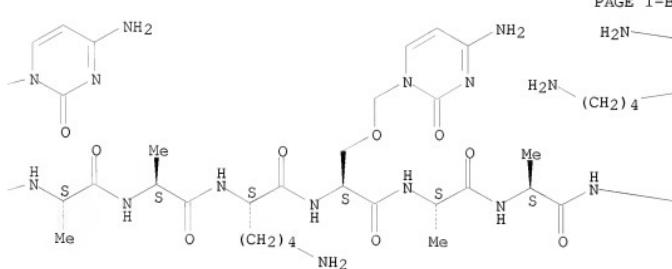
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 (CA INDEX NAME)

Absolute stereochemistry.

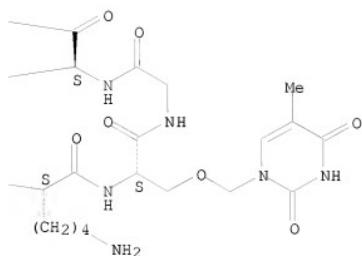
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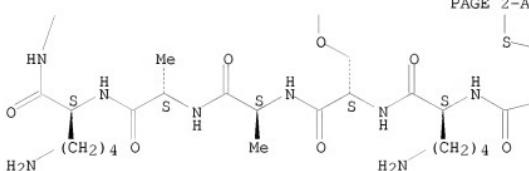
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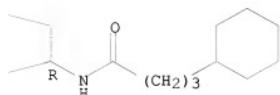
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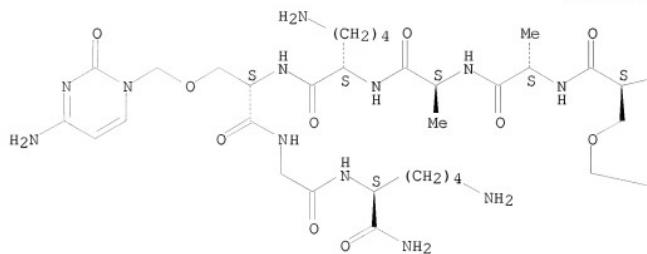


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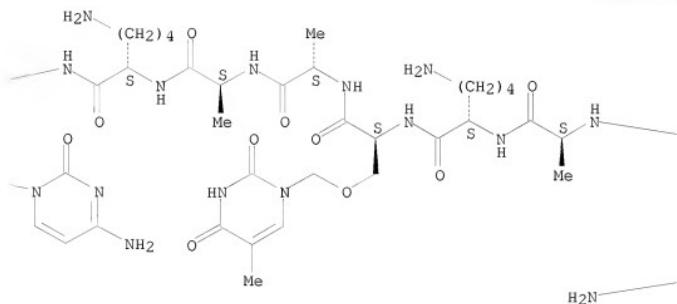
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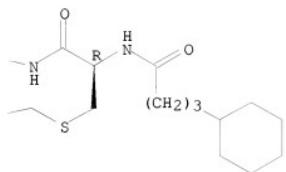
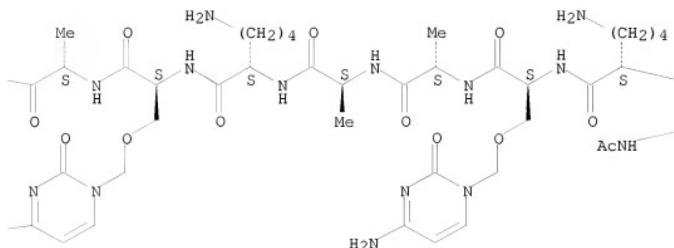
Absolute stereochemistry.

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RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

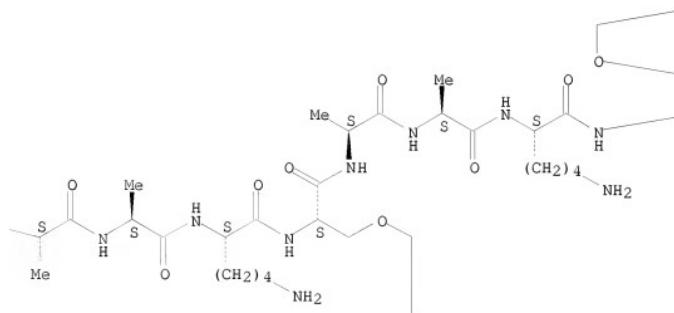
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 CS Department of Chemistry, Case Western Reserve University, Cleveland, OH, 44106-7078, USA  
 SO Journal of the American Chemical Society (2000), 122(10), 2405-2406  
 CODEN: JACSAT; ISSN: 0002-7863  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB Peptide nucleic acid analogs comprising an  $\alpha$ -helix forming peptide [Ac-CysAcm-Lys-(SerB-Ala2-Lys)-)4SerB-Gly-Lys-NH<sub>2</sub>] (I) or Ac-Lys2-(SerB-ala2-Lys)4-SerB-Gly-CysAcm-NH<sub>2</sub>] with nucleobases attached to the regularly spaced serine residues ( $\alpha$ PNAs) are capable of forming Watson-Crick base pairs with complimentary single-stranded nucleic acid targets.  $\alpha$ PNAs with as few as five nucleobases bind with high affinity in a sequence-specific manner. Gel-shift mobility and CD titration studies were performed for nine  $\alpha$ PNA-DNA hybridization duplexes. No binding was observed between abasic I and d(TA3G5A3T).  
 IT 268568-85-0P 268568-87-2P 268568-88-3P  
 268568-89-4P 268568-90-7P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and hybridization of DNA by  $\alpha$ -helical peptide nucleic acids)  
 RN 268568-85-0 CAPLUS  
 CN DNA, d(A-A-A-A-A-A-A-A), compd. with  
 N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-serylglycyl-L-lysinamide (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 267241-31-6  
 CMF C115 H185 N39 O38 S

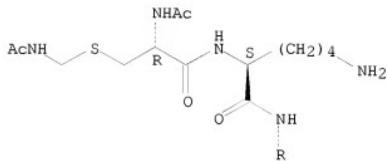
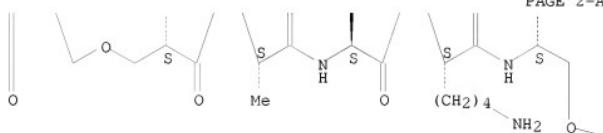
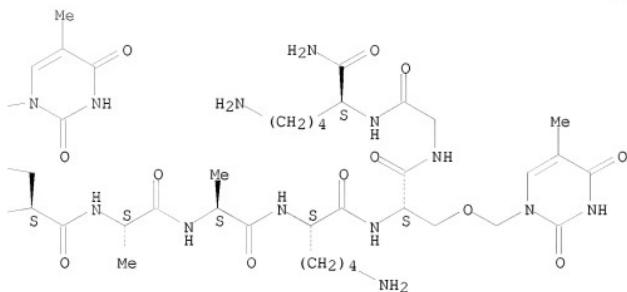
Absolute stereochemistry.

PAGE 1-A

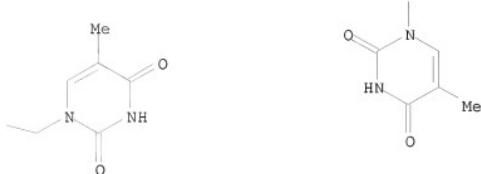


PAGE 1-B





PAGE 2-B



CM 2

CRN 55508-40-2  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 268568-87-2 CAPLUS  
 CN DNA, d(A-A-G-G-A-G-G-A-A-A), compd. with  
 N-acetyl-5-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(4-amino-2-oxo-  
 1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-  
 oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-  
 dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-  
 alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-  
 alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-  
 serylglycyl-L-lysinamide (9CI) (CA INDEX NAME)

CM 1

CRN 268198-00-1  
 CMF Unspecified  
 CCI MAN

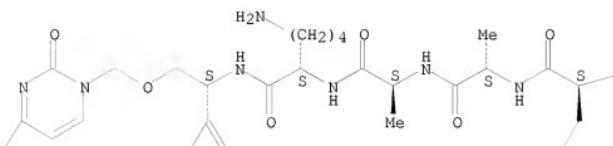
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

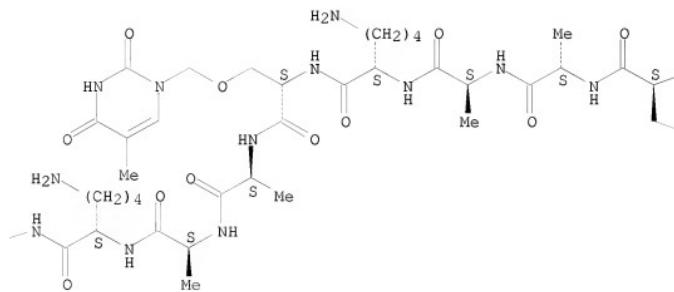
CRN 267241-34-9  
 CMF C111 H181 N43 O34 S

Absolute stereochemistry.

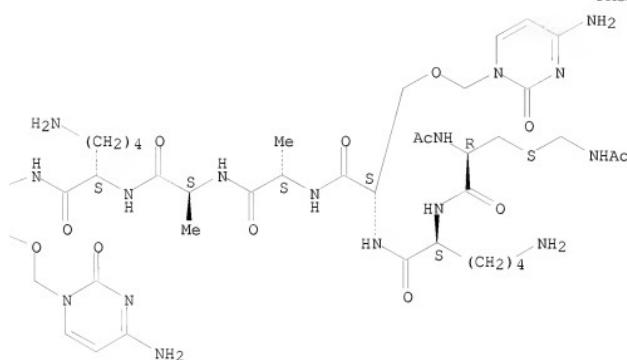
PAGE 1-A



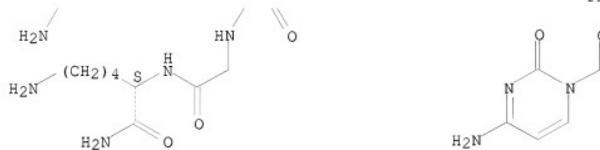
PAGE 1-B



PAGE 1-C



PAGE 2-A



RN 268568-88-3 CAPLUS

CN DNA, d(T-A-A-A-G-G-G-A-A-T), compd. with  
 N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(4-amino-2-oxo-  
 1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-  
 oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-  
 dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-  
 alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-  
 alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-  
 serylglycyl-L-lysinamide (9CI) (CA INDEX NAME)

CM 1

CRN 268198-01-2

CMF Unspecified

CCI MAN

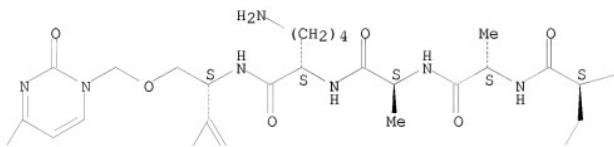
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

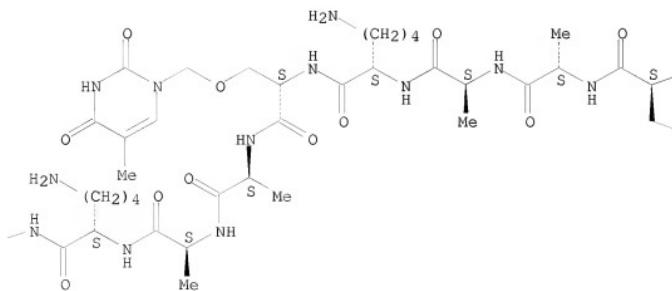
CRN 267241-34-9  
 CMF C111 H181 N43 O34 S

Absolute stereochemistry.

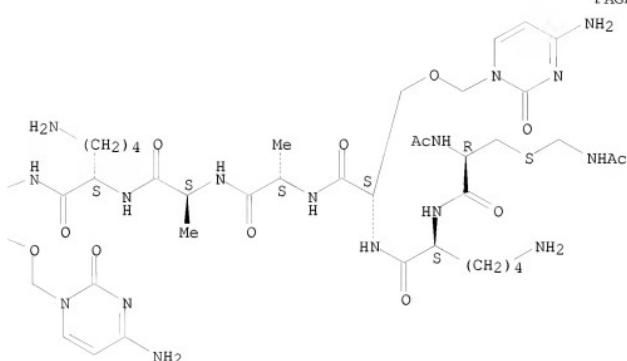
PAGE 1-A



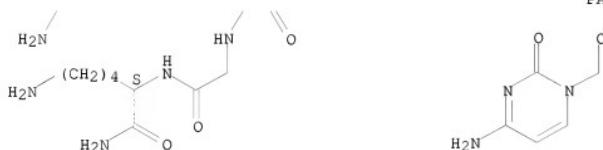
PAGE 1-B



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RN 268568-89-4 CAPLUS  
 CN DNA, d(A-A-A-A-G-G-A-G-A-A-A), compd. with  
 N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(4-amino-2-oxo-  
 1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-  
 dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-  
 alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-  
 alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-  
 seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-  
 pyrimidinyl)methyl]-L-serylglycyl-L-lysinamide (1:1) (9CI) (CA INDEX  
 NAME)

CM 1

CRN 268197-99-5  
 CMF Unspecified  
 CCI MAN

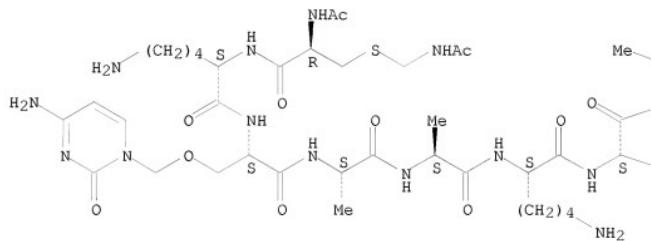
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

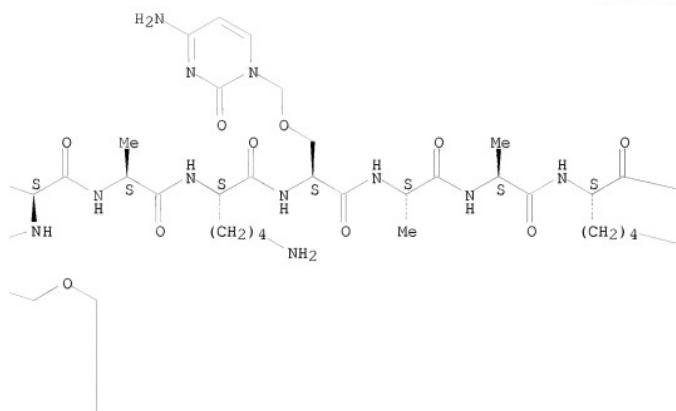
CRN 267241-35-0  
 CMF C112 H182 N42 O35 S

Absolute stereochemistry.

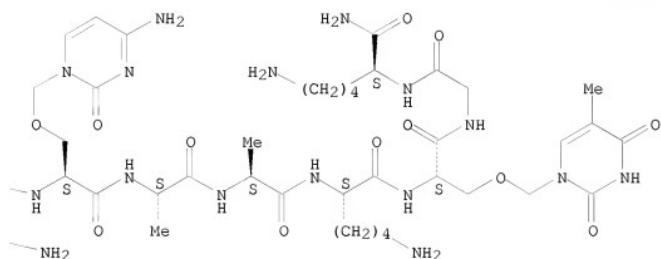
PAGE 1-A



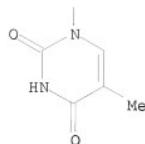
PAGE 1-B



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PAGE 2-B



RN 268568-90-7 CAPLUS  
 CN DNA, d(A-A-G-A-G-G-A-A-A), compd. with  
 N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(4-amino-2-oxo-  
 1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-  
 dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-  
 alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-  
 alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-  
 seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-  
 pyrimidinyl)methyl]-L-serylglycyl-L-lysinamide (1:1) (9CI) (CA INDEX  
 NAME)

CM 1

CRN 268197-98-4

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

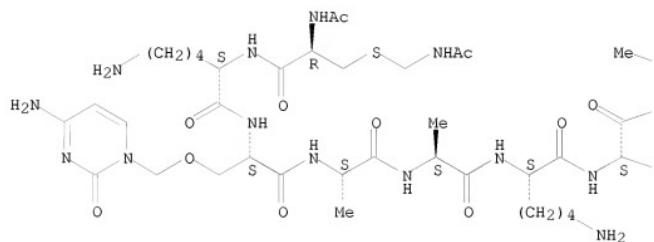
CM 2

CRN 267241-35-0

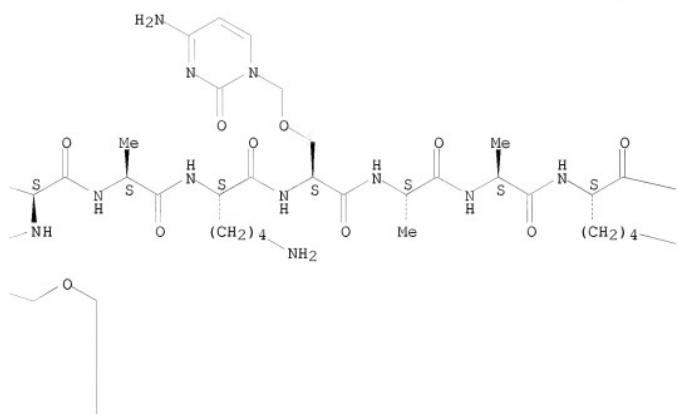
CMF C112 H182 N42 O35 S

Absolute stereochemistry.

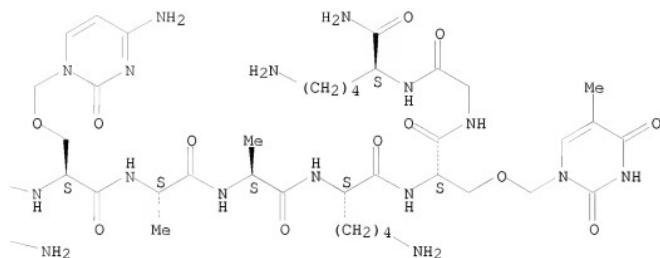
PAGE 1-A



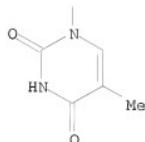
PAGE 1-B



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IT 267241-31-6P 267241-34-9P 267241-35-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

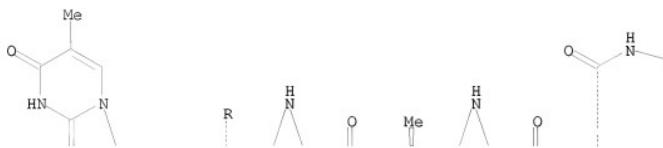
(preparation and hybridization of DNA by  $\alpha$ -helical peptide nucleic acids)

RN 267241-31-6 CAPLUS

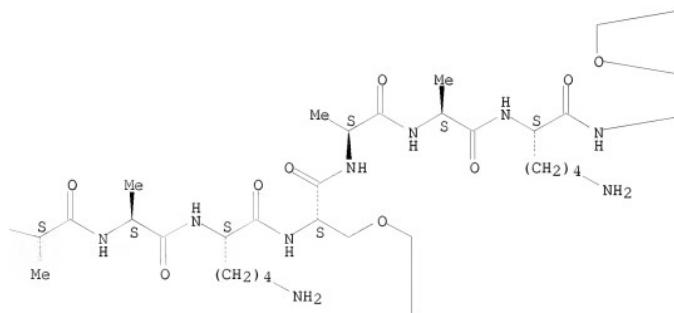
CN L-Lysinamide, N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-serylglycyl- (9CI) (CA INDEX NAME)

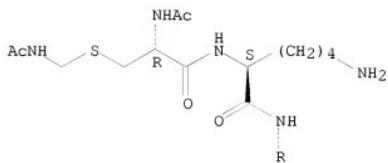
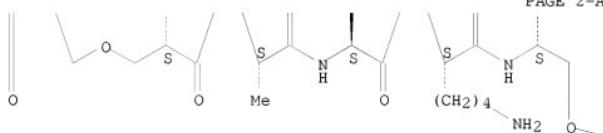
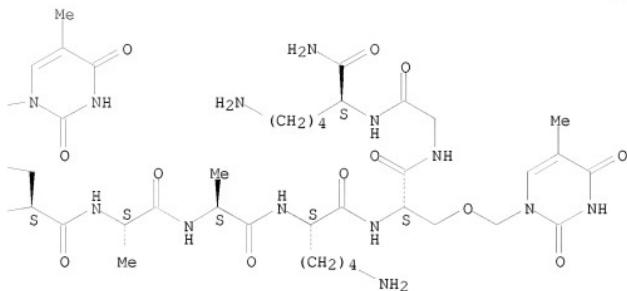
Absolute stereochemistry.

PAGE 1-A

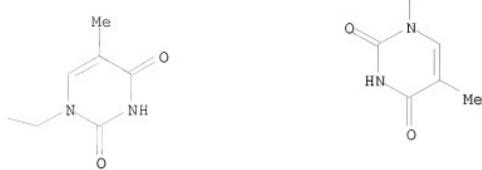


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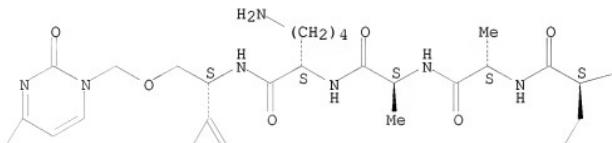


RN 267241-34-9 CAPLUS

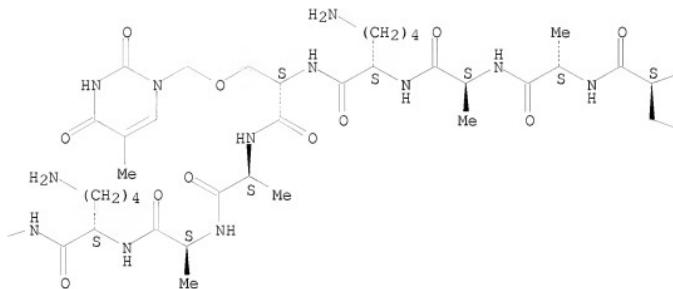
CN L-Lysinamide, N-acetyl-S-[(acetylamino)methyl]-L-cysteinyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-lysylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

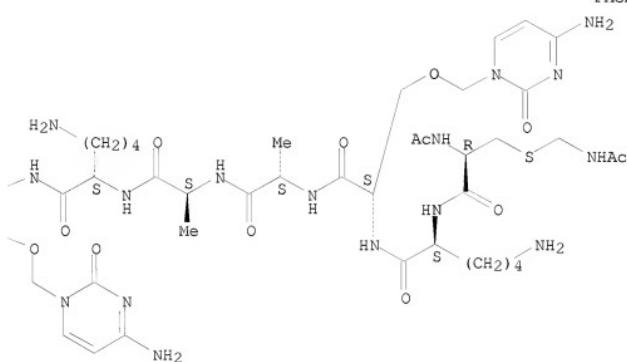
PAGE 1-A

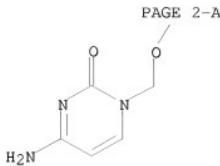
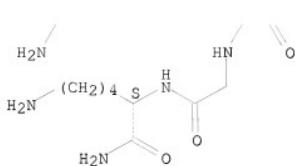


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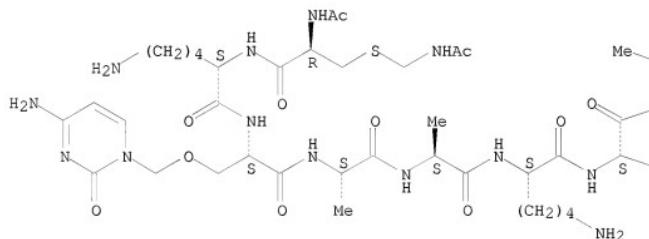


RN 267241-35-0 CAPLUS

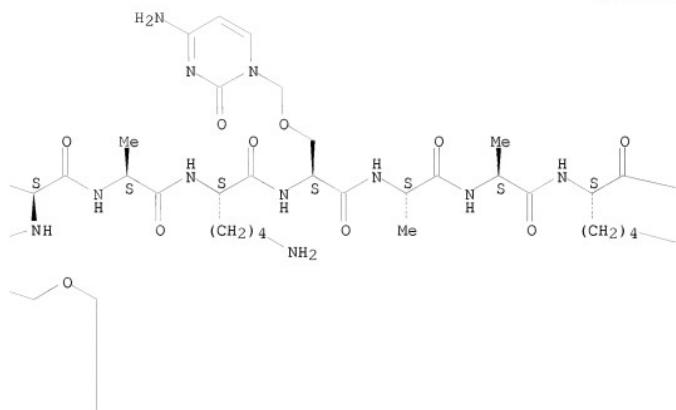
CN L-Lysinamide, N-acetyl-S-[(acetylaminomethyl]-L-cysteinyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(4-amino-2-oxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-serylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

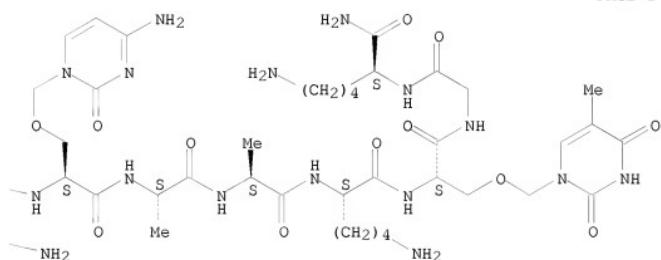
PAGE 1-A



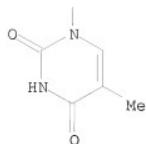
PAGE 1-B



PAGE 1-C



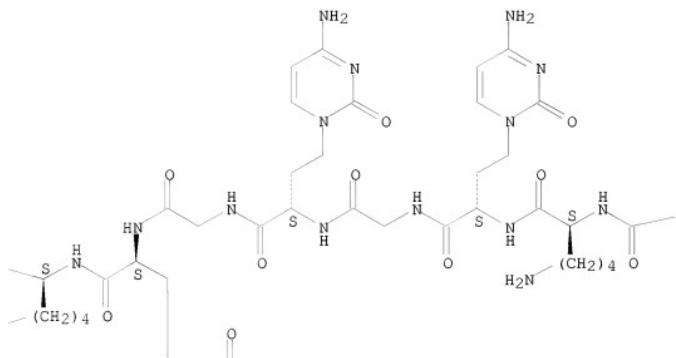
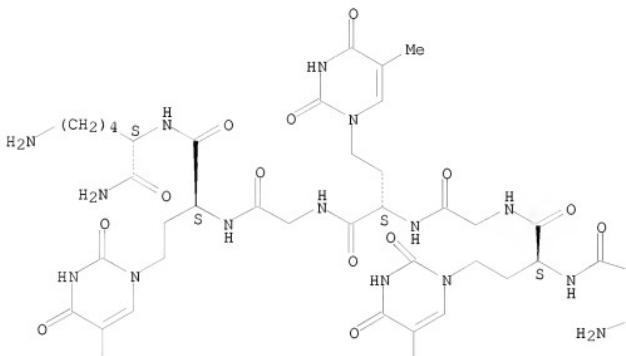
PAGE 2-B



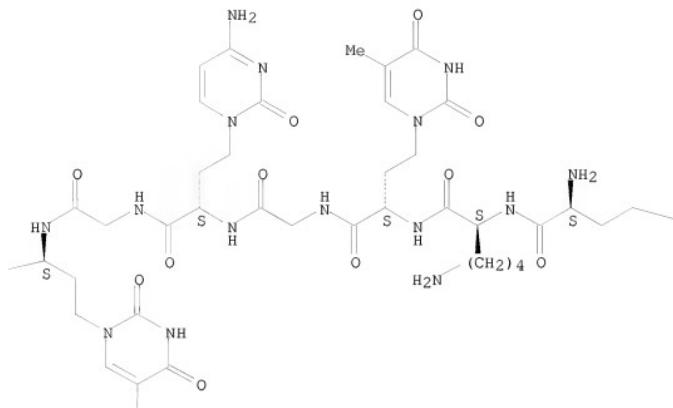
OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)  
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 55 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2000:59662 CAPLUS  
 DN 132:293990  
 TI  $\alpha$ -PNA: A novel peptide nucleic acid analogue of DNA. [Erratum to document cited in CA127:220967]  
 AU Howarth, Nicola M.; Wakelin, Laurence P. G.  
 CS Cancer Drug Discovery, Dep. Chem., Univ. Coll. Dublin, Dublin, Ire.  
 SO Journal of Organic Chemistry (2000), 65(2), 634  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB On page 5442, the paragraph should read: "During the course of our work, Lenzi et al.<sup>21,22</sup> presented a preliminary report on the preparation of an  $\alpha$ -PNA in which the base-amino acids are derived from L-glutamic acid.<sup>21</sup> This results in an  $\alpha$ -PNA of identical chirality (i.e., L-) to that described here."  
 IT 194920-19-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of novel backbone-attached peptide nucleic acid building blocks (Erratum))  
 RN 194920-19-9 CAPLUS  
 CN L-Lysinamide, ( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoyl-L-lysyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-lysyl-( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-lysyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl- (9CI) (CA INDEX NAME)

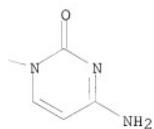
Absolute stereochemistry.



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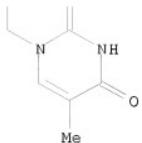
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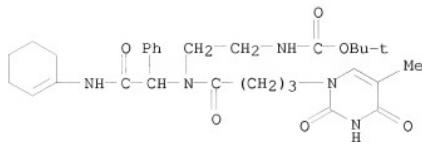
PAGE 2-C

Me  
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RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 56 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2000:53602 CAPLUS  
 DN 132:108299  
 TI Preparation of precursors for PNA monomers  
 IN Martens, Jurgen; Maisen, Wolfgang; Schlemminger, Imre; Westerhoff, Ole;  
 Groger, Harald  
 PA Germany  
 SO PCT Int. Appl., 72 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

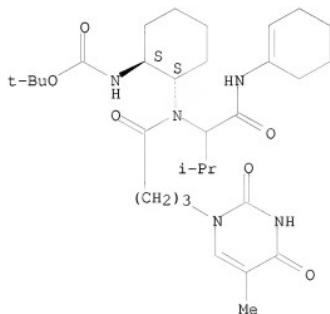
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000002864	A1	20000120	WO 1998-EP4281	19980710
	W: AT, AU, BG, BR, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HR, HU, IL, JP, KR, LU, MK, MX, NO, NZ, PL, PT, RU, SE, SI, TR, US, YU RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
PRAI WO 9890645	A	20000201	AU 1998-90645	19980710
OS MARPAT 132:108299	A	19980710		
AB Compds. X-CO-E-N(D-Y)CO-A-B [A is a single bond, o-phenylene, or a group (CR1R2)n (n = 1-3, R1, R2 = H, OH, amino, F, Cl, Br, iodo, aryl, or alkyl optionally substituted by amino, hydroxy, alkoxy, or alkylthio); B = H, alkyl, nucleobases, aromatic or heterocyclic moieties, DNA intercalators, nucleobase-binding groups, reporter ligands, vinyl, Cl, Br, iodo, OH; D = o-phenylene or CR3R4CR5R6 (R3, R4, R5, R6 = H, alkyl, or aryl optionally substituted by alkyl, OH, alkoxy, nitro, aryl, alkoxy carbonyl, halo, or carbohydrate moieties or R3 and R5 or R3 and R4 taken together complete an alicyclic system); E is CR7R8 (R7, R8 = H, alkyl, or aryl optionally substituted by alkyl, OH, alkoxy, nitro, aryl, alkoxy carbonyl, halo, or carbohydrate moieties or R7 and R8 taken together complete an alicyclic or heterocyclic system which may be substituted by alkyl, OH, alkoxy, nitro, aryl, alkoxy carbonyl, or halo groups); X is R10R11:CR9NH (R9, R10, R11 = H, alkyl, or aryl or R9 and R10 taken together with the vinyl group complete a five- or six-membered alicyclic system or a heteroarom. system, each of which may be substituted); Y is NR12R13 (R12, R13 = H, an amino protecting group, OR14 or SR14, where R14 is H or a protecting group)] were prepared as precursors for PNA monomers. Thus, 1-cyclohexenyl isocyanide was added to a stirred mixture of mono-Boc-ethylenediamine (Boc = tert-butoxycarbonyl), 4-nitrobenzaldehyde, and N4-Z-N-1-carboxymethylcytosine (Z = benzyloxycarbonyl) in methanol and the mixture heated for five minutes to reflux and stirred for 48 h at room temperature to afford 36% rac-2-[(2'-Boc-aminoethyl)-N4-Z-cytosineacetyl-amino]-p-nitrophenylacetic acid cyclohexen-1''-ylamide. IT 255736-60-8P 255736-68-6P 255736-77-7P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of precursors for PNA monomers) RN 255736-60-8 CAPLUS CN Carbanic acid, [2-[(2-(1-cyclohexen-1-ylamino)-2-oxo-1-phenylethyl)[4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-1-oxobutyl]amino]ethyl]-, 1,1-dimethyl ethyl ester (9CI) (CA INDEX NAME)				



RN 255736-68-6 CAPLUS

CN Carbamic acid, [(1R,2R)-2-[(1-[(1-cyclohexen-1-ylamino)carbonyl]-2-methylpropyl)[4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-1-oxobutyl]amino]cyclohexyl]-, 1,1-dimethylethyl ester, rel- (9CI) (CA INDEX NAME)

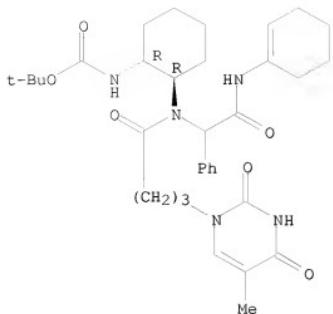
Relative stereochemistry.



RN 255736-77-7 CAPLUS

CN Carbamic acid, [(1R,2R)-2-[(2-(1-cyclohexen-1-ylamino)-2-oxo-1-phenylethyl)[4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-1-oxobutyl]amino]cyclohexyl]-, 1,1-dimethylethyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 57 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1999:670140 CAPLUS  
 DN 131:286820

TI Preparation of oligonucleotide analogs having an amino acid or a modified amino alcohol residue

IN Ramasamy, Kandasamy; Seifert, Wilfried E.

PA ICN Pharmaceuticals, Inc., USA

SO U.S., 65 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5969135	A	19991019	US 1995-551947	19951102
PRAI US 1995-551947				

AB The compds. of the invention are oligonucleotide analogs in which the furanose ring of a naturally occurring nucleic acid is replaced with an amino acid or a modified amino alc. residue. The synthesis of monomeric precursors of the oligonucleotide analogs of the invention is described. Thus, 1-O-(4,4'-dimethoxytrityl)-2-[(thyminylacetyl)amino]-L-propan-3-O-N,N-diisopropyl-β-cyanoethylphosphoramidite was prepared from L-serine Me ester, thymineacetic acid, and 2-cyanoethyl-N,N-diisopropylchlorophosphoramidite. Oligonucleotides containing modified amino acid nucleic acid backbones were synthesized on an automated DNA synthesizer using standard phosphoramidite chemical. The ability of the amino acid modified oligonucleotides to hybridize to their complementary RNA and DNA sequences is determined by thermal melting anal.

IT 179472-14-1P 179472-15-2P 179472-16-3P

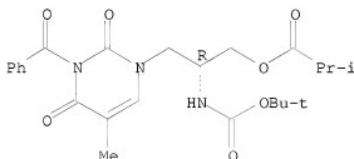
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of oligonucleotide analogs having amino acid or modified amino alc. residue)

RN 179472-14-1 CAPLUS

CN Propanoic acid, 2-methyl-, (2R)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(1,1-dimethylethoxy)carbonyl]aminopropyl ester (CA INDEX NAME)

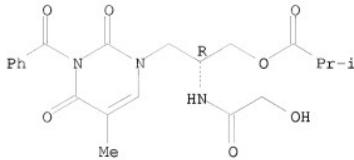
Absolute stereochemistry.



RN 179472-15-2 CAPLUS

CN Propanoic acid, 2-methyl-, (2R)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(hydroxyacetyl)amino]propyl ester (9CI) (CA INDEX NAME)

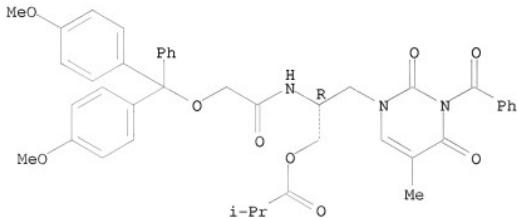
Absolute stereochemistry.



RN 179472-16-3 CAPLUS

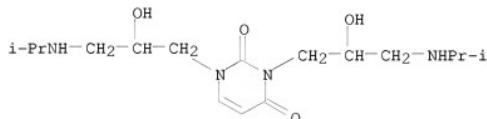
CN Propanoic acid, 2-methyl-, (2R)-3-((3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[[bis(4-methoxyphenyl)phenylmethoxy]acetyl]amino)propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

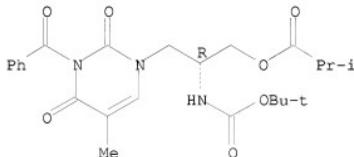
L11 ANSWER 58 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1999:593856 CAPLUS  
 DN 131:299642  
 TI Synthesis and biological evaluation of the novel purine and pyrimidine nucleoside analogues containing 2,3-epoxypropyl, 3-amino-2-hydroxypropyl or 2,3-epoxypropyl ether moieties  
 AU Raic-Malic, Silvana; Grdisa, Mira; Pavelic, Kresimir; Mintas, Mladen  
 CS Department of Organic Chemistry, Faculty of Chemical Engineering and Technology, Zagreb, HR-10000, Croatia  
 SO European Journal of Medicinal Chemistry (1999), 34(5), 405-413  
 CODEN: EJMCA5; ISSN: 0223-5234  
 PB Editions Scientifiques et Medicales Elsevier  
 DT Journal  
 LA English  
 AB The novel purine and pyrimidine nucleoside analogs possessing a 2,3-epoxypropyl, 2,3-epoxypropyl ether, or 3-amino-2-hydroxypropyl, e. g. I, moiety bonded at either N-9 of the C-6 substituted purine ring or N-1 and N-3 of the pyrimidine ring, were prepared and evaluated on their antitumor and antiviral activities.  
 IT 247092-22-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and antitumor and antiviral activities of nucleosides containing 2,3-epoxypropyl, 3-amino-2-hydroxypropyl or 2,3-epoxypropyl ether moieties)  
 RN 247092-22-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1,3-bis[2-hydroxy-3-[(1-methylethyl)amino]propyl]- (CA INDEX NAME)



OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)  
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

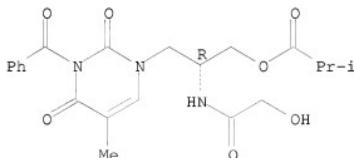
L11 ANSWER 59 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1999:508690 CAPLUS  
 DN 131:351614  
 TI Synthesis and biophysical studies of modified oligonucleotides containing acyclic amino alcohol nucleoside analogs  
 AU Ramasamy, Kanda S.; Stoislavijevic, Vesna  
 CS Research Division, ICN Pharmaceuticals, Inc., Costa Mesa, CA, 92626, USA  
 SO Nucleosides & Nucleotides (1999), 18(8), 1845-1861  
 CODEN: NUNUD5; ISSN: 0732-8311  
 PB Marcel Dekker, Inc.  
 DT Journal  
 LA English  
 OS CASREACT 131:351614  
 AB Novel serine derivative of thymine was prepared and incorporated into oligonucleotides. These modified oligonucleotides were studied for their binding affinity with complementary DNA/RNA.  
 IT 179472-14-1P 179472-15-2P 179472-16-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and enzymic resistance of modified oligonucleotides containing acyclic amino alc. nucleoside analogs)  
 RN 179472-14-1 CAPLUS  
 CN Propanoic acid, 2-methyl-, (2R)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(1,1-dimethylethoxy)carbonyl]amino]propyl ester (CA INDEX NAME)

Absolute stereochemistry.



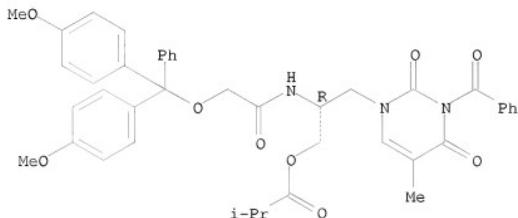
RN 179472-15-2 CAPLUS  
 CN Propanoic acid, 2-methyl-, (2R)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(hydroxyacetyl)amino]propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 179472-16-3 CAPLUS  
 CN Propanoic acid, 2-methyl-, (2R)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[{[bis(4-methoxyphenyl)phenylmethoxy]acetyl]amino}propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

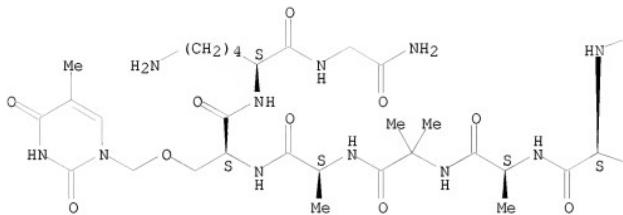


OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
 RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

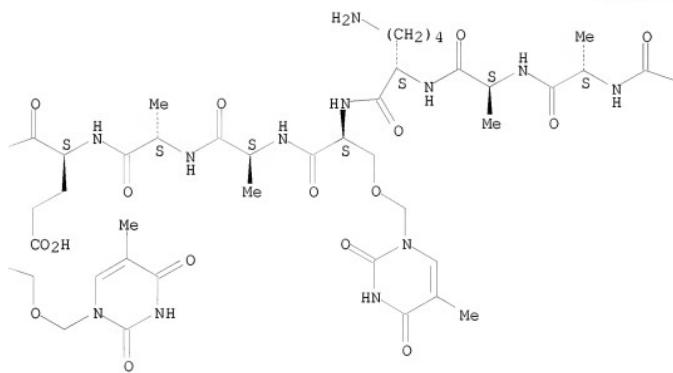
L11 ANSWER 60 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1999:376918 CAPLUS  
 DN 131:157957  
 TI Modular Nucleic Acid Surrogates. Solid Phase Synthesis of  $\alpha$ -Helical Peptide Nucleic Acids ( $\alpha$ PNA)s  
 AU Garner, Philip; Dey, Subhakar; Huang, Yumei; Zhang, Xiao  
 CS Department of Chemistry, Case Western Reserve University, Cleveland, OH, 44106-7078, USA  
 SO Organic Letters (1999), 1(3), 403-405  
 CODEN: ORLEF7; ISSN: 1523-7060  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB The synthesis and characterization of prototype  $\alpha$ -helical peptide nucleic acid ( $\alpha$ PNA) modules, e.g., Ac-C(Acm)-G-ST-D-A-E-ST-A-A-K-ST-A-A-E-ST-A-Aib-A-ST-K-G-NH2 [1; Acm = acetamidomethyl, ST = 1-[ $\alpha$ (Ser)methyl]thymine residue, Aib = 2-aminoisobutyric acid residue] as well as disulfide dimers are reported. These mols. combine an  $\alpha$ -helical peptidyl scaffold with well-defined nucleobase mol. recognition patterns and could serve as a basis for novel antisense and/or antigenic agents. Structure assignments for these  $\alpha$ PNA's were supported by MALDI-TOF mass spectrometry, and the  $\alpha$ -helical nature of 1 dimer in water was confirmed by CD spectroscopy.  
 IT 236755-57-0P 236755-58-1P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (solid phase synthesis of  $\alpha$ -helical peptide nucleic acids)  
 RN 236755-57-0 CAPLUS  
 CN Glycinamide, N-acetyl-S-[(acetylamino)methyl]-L-cysteinylglycyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L- $\alpha$ -aspartyl-L-alanyl-L- $\alpha$ -glutamyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-2-methylalanyl-L-alanyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-lysyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

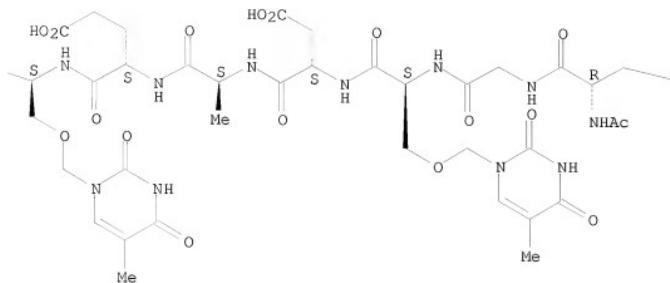
PAGE 1-A



PAGE 1-B



PAGE 1-C



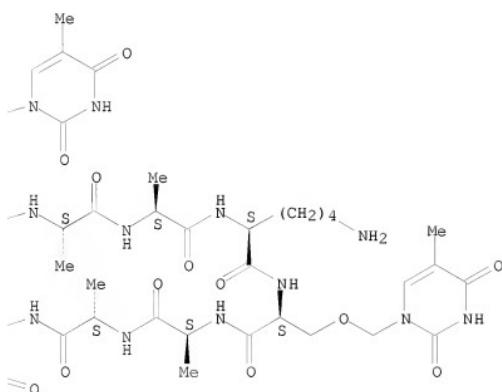
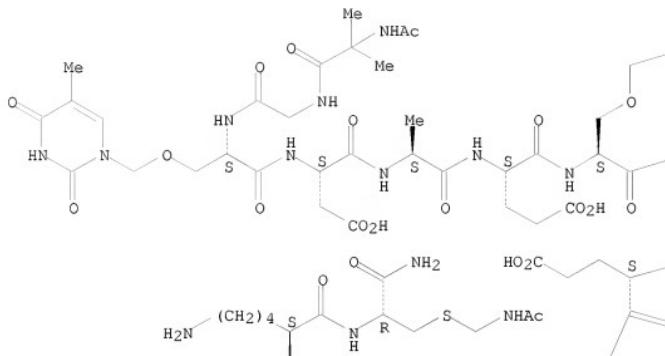
PAGE 1-D

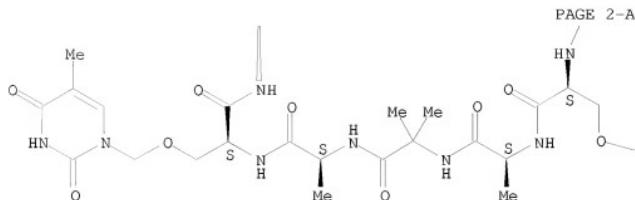


RN 236755-58-1 CAPLUS

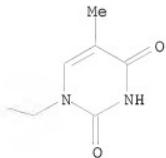
CN L-Cysteinamide, N-acetyl-2-methylalanylglucyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L- $\alpha$ -aspartyl-L-alanyl-L- $\alpha$ -glutamyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L-lysyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-L-alanyl-L- $\alpha$ -glutamyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-alanyl-2-methylalanyl-L-alanyl-O-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]-L-seryl-L-lysyl-S-(acetylamino)methyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.





PAGE 2-B



OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)  
 RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 61 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1999:205354 CAPLUS  
 DN 130:237811

TI Preparation of ethylene glycol phosphate linked oligodeoxyribonucleotides as phospholipase A2 inhibitors

IN Cook, Phillip Dan; Acevedo, Oscar L.; Davis, Peter W.; Ecker, David J.; Hebert, Normand

PA ISIS Pharmaceuticals, Inc., USA

SO U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 179,970.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5886177	A	19990323	US 1996-669506	19960808
US 6448373	B1	20020910	US 1994-179970	19940111
WO 9518820	A1	19950713	WO 1995-US449	19950111

W: CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI US 1994-179970 A2 19940111

WO 1995-US449 W 19950111

AB Novel ethylene glycol compds. I wherein; X is H, a phosphate group, phosphite group, a solid support, an oligodeoxyribonucleotide; Y is H, a hydroxyl protecting group, an oligodeoxyribonucleotide; E is O or S; EE is OH or amine; Q is alkyl, alkynyl, alkenyl, carbocycloalkyl, heterocycle; Z is alkyl, alkenyl, alkynyl, aminoalkyl,, aryl, aralkyl; m is 0, 1; n is 1-50; j is 1-6, are used to prepare oligodeoxyribonucleotides. The ethylene glycol monomers can be joined via standard phosphate linkages including phosphorothioate, phosphodiester, and phosphoramidate linkages. Useful functional groups include nucleobases as well as polar groups, hydrophobic groups, ionic groups, aromatic groups and/or groups that participate in hydrogen-bonding. Thus, 1-[1-(N4-Benzoyl)cytosine]-3-O-dimethoxytrityl-2-O-[(N,N-diisopropylamino)-2-cyanoethoxyphosphitel]propane was prepared and used in synthesis of ethylene glycol phosphate linked oligodeoxyribonucleotides as phospholipase A2 inhibitors.

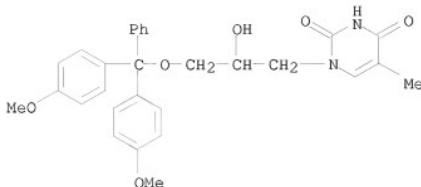
IT 171406-23-8P 171406-29-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

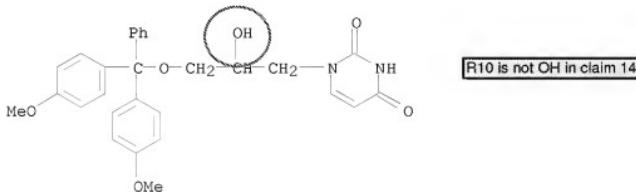
(preparation of ethylene glycol phosphate linked oligodeoxyribonucleotides as phospholipase A2 inhibitors)

RN 171406-23-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)



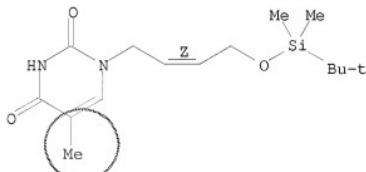
RN 171406-29-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(4-methoxyphenyl)phenoxy]methoxy]-2-hydroxypropan-1-one - (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

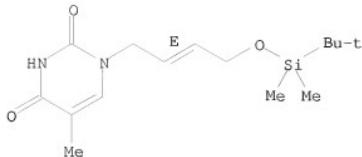
L11 ANSWER 62 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1998:360381 CAPLUS  
 DN 129:108928  
 OREF 129:22384h,22385a  
 TI Synthesis and anti-HIV-1 activity of hydroxybutenyl C6-thiophenyl thymine nucleoside analogs  
 AU Zhou, Ziaoxin; Rajaratnam, Ragine; Phadtare, Shashi  
 CS College of Pharmacy, Xavier University of Louisiana, New Orleans, LA, 70125, USA  
 SO Pharmacy and Pharmacology Communications (1998), 4(5), 237-240  
 CODEN: PPCOFN; ISSN: 1460-8081  
 PB Royal Pharmaceutical Society of Great Britain  
 DT Journal  
 LA English  
 OS CASREACT 129:108928  
 AB New acyclic hydroxybutenyl C6-thiophenyl thymine nucleoside analogs of 1-[(2-hydroxyethoxy)methyl]6-(phenylthio)thymine (HEPT), have been designed, synthesized and tested as potential anti-HIV-1 agents in ATH8 cell lines. The hydroxybutenyl C6-thiophenyl thymine compds. were prepared by alkylation of thymine with cis- or trans-1,4-dichlorobutene to give chloro compds. which were then hydrolyzed to give alcs. After protecting the 4'-hydroxy with t-butyldimethylsilyl, the resultant compds. were selectively reacted with lithium diisopropylamine and treated with diphenylsulfide to give C6-thiophenyl analogs. The C6-thiophenyl thymine nucleoside analogs were isolated by hydrolysis. All chloro and hydroxy compds. were tested for percentage cell viability in HIV-1-infected ATH8 cell line and were found to be moderately effective when compared with azidothymidine. Unsubstituted thymine alcs. showed 40-55% cell viability at 0.5  $\mu$ M concns. compared with 15-18% for C6-thiophenyl-substituted thymine alcs.  
 IT 210053-30-8P 210053-35-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and anti-HIV-1 activity of hydroxybutenyl C6-thiophenyl thymine nucleoside analogs)  
 RN 210053-30-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2Z)-4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-buten-1-yl]-5-methyl- (CA INDEX NAME)

Double bond geometry as shown.



RN 210053-35-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2E)-4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-buten-1-yl]-5-methyl- (CA INDEX NAME)

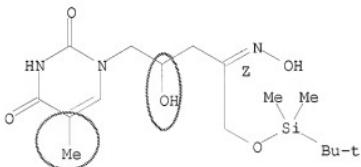
Double bond geometry as shown.



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

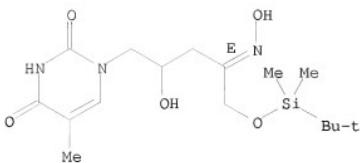
L11 ANSWER 63 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1998:329100 CAPLUS  
 DN 129:54525  
 OREF 129:11369a,11372a  
 TI Heterocyclic nucleoside analogs by cycloaddition reactions of 1-vinylthymine with 1,3-dipoles  
 AU Adams, David R.; Boyd, Alan S. F.; Ferguson, R.; Grierson, David S.; Monneret, Claude  
 CS Chemistry Department, Heriot-Watt University, Edinburgh, EH14 4AS, UK  
 SO Nucleosides & Nucleotides (1998), 17(6), 1053-1075  
 CODEN: NUNUD5; ISSN: 0732-8311  
 PB Marcel Dekker, Inc.  
 DT Journal  
 LA English  
 OS CASREACT 129:54525  
 AB 1,3-Dipolar cycloaddn. of 1-vinylthymine to azides, nitrile oxides, nitrones and nitronates has been investigated as a route to heterocyclic nucleoside analogs in which the nucleoside ribose moiety has been replaced by an alternative heterocycle. Reaction of 1-vinylthymine with highly reactive nitrile oxides affords 1-(isoxazolin-5-yl)thymine products in excellent yield at room temperature. The less reactive nitrone dipoles undergo cycloaddn. to 1-vinylthymine at elevated temperature to afford 1-(isoxazolidin-5-yl)thymine cycloadducts in good-to-moderate yields, but show a tendency to eliminate thymine from the cycloaddn. products over long reaction times. Azide cycloaddns. to 1-vinylthymine proceed only under forcing conditions to which the fragile triazoline products are unstable. Certain compds. were tested for anti-HIV activity and found to be inactive.  
 IT 208707-16-8P 208707-17-9P 208707-18-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of heterocyclic nucleoside analogs by cycloaddn. reactions of vinylthymine with dipoles)  
 RN 208707-16-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(4Z)-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-4-(hydroxyimino)pentyl]-5-methyl- (CA INDEX NAME)

Double bond geometry as shown.



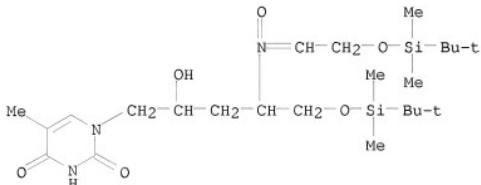
RN 208707-17-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(4E)-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-4-(hydroxyimino)pentyl]-5-methyl- (CA INDEX NAME)

Double bond geometry as shown.



RN 208707-18-0 CAPLUS

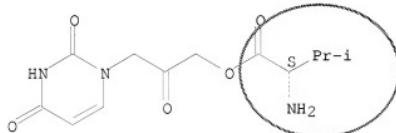
CN Pentitol, 1,3,4-trideoxy-1-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-5-O-[(1,1-dimethylethyl)dimethylsilyl]-4-[[2-[(1,1-dimethylethyl)dimethylsilyloxy]ethylidene]oxidoamino] - (9CI) (CA INDEX NAME)



OSC.G 34 THERE ARE 34 CAPLUS RECORDS THAT CITE THIS RECORD (34 CITINGS)  
 RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 64 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1998:320817 CAPLUS  
 DN 129:54561  
 OREF 129:11377a,11380a  
 TI Synthesis and solution structures of aminoacyl compounds of potential prebiotic significance  
 AU Sutherland, John D.; Cook, Stephen D.  
 CS The Dyson Perrins Laboratory, Oxford, OX1 3QY, UK  
 SO Tetrahedron Letters (1998), 39(20), 3299-3302  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 OS CASREACT 129:54561  
 AB The chemical synthesis and solution structure determination of aminoacylated glycoaldehyde and nucleobase-substituted dihydroxyacetone derivs. H-L-Val-OCH<sub>2</sub>COR (R = H, adenin-1-yl, uracil-1-yl) are described.  
 IT 208576-26-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and solution structures of valine nucleobase-substituted hydroxyacetone derivative esters)  
 RN 208576-26-5 CAPLUS  
 CN L-Valine, 3-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-2-oxopropyl ester  
 (CA INDEX NAME)

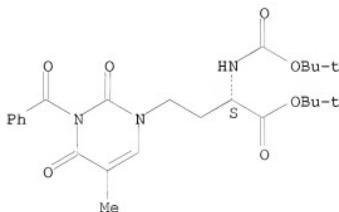
Absolute stereochemistry.



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

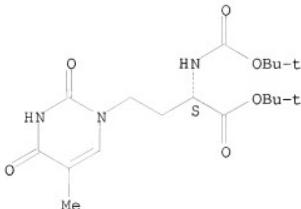
L11 ANSWER 65 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1998:81929 CAPLUS  
 DN 128:167695  
 OREF 128:33061a,33064a  
 TI Design and synthesis of chiral peptidic nucleic acids  
 AU Ciapetti, Paola; Mann, Andre; Schoenfelder, Angele; Taddei, Maurizio;  
 Trifilieff, Elisabeth; Canet, Isabelle; Canet, Jean Louis  
 CS Dep. Chimica, Univ. Sassari, Sassari, I-07100, Italy  
 SO Letters in Peptide Science (1997), 4(4/5/6), 341-349  
 CODEN: LPSCEM; ISSN: 0929-5666  
 PB Kluwer Academic Publishers  
 DT Journal  
 LA English  
 AB Due to the increasing interest in the use of oligonucleotide analogs as antisense and antigene drugs, the authors designed a chiral analog constituted of a peptide frame bearing nucleobases in suitable positions (C-PNA). The authors recently reported the synthesis of four nonnatural  $\alpha$ -amino acids with the DNA bases in the lateral chain. In this paper they present an improved synthesis of the 9-fluorenylmethoxycarbonyl (Fmoc) monomers I-IV and their polymerization to polypeptidic oligonucleotide analogs using a modification of the standard protocol for solid phase peptide synthesis.  
 IT 168264-02-6P 168264-03-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (design and synthesis of chiral peptide nucleic acids containing homoserine backbones)  
 RN 168264-02-6 CAPLUS  
 CN 1(2H)-Pyrimidinebutanoic acid, 3-benzoyl- $\alpha$ -[(1,1-dimethylmethoxy)carbonyl]amino]-3,4-dihydro-5-methyl-2,4-dioxo-, 1,1-dimethylethyl ester, ( $\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 168264-03-7 CAPLUS  
 CN 1(2H)-Pyrimidinebutanoic acid,  $\alpha$ -[(1,1-dimethylmethoxy)carbonyl]amino]-3,4-dihydro-5-methyl-2,4-dioxo-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 202870-88-0P

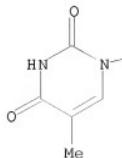
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (design and synthesis of chiral peptide nucleic acids containing homoserine  
 backbones)

RN 202870-88-0 CAPLOS

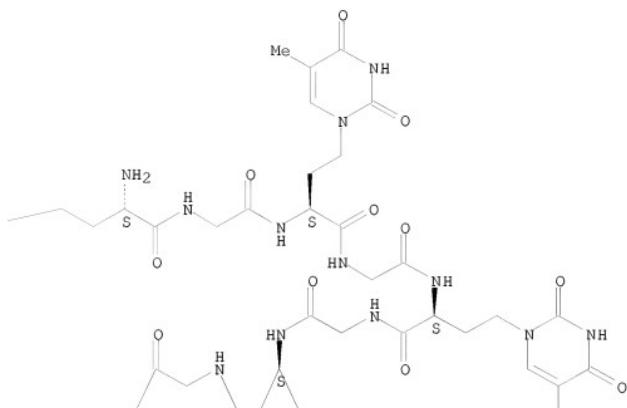
CN L-Lysine, (αS)-α-amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-  
 pyrimidinebutanoylglycyl-(αS)-α-amino-3,4-dihydro-5-methyl-2,4-  
 dioxo-1(2H)-pyrimidinebutanoylglycyl-(αS)-α-amino-3,4-dihydro-  
 5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-(αS)-α-amino-  
 3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-(αS)-  
 α-amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-  
 pyrimidinebutanoylglycyl-(αS)-α-amino-3,4-dihydro-5-methyl-2,4-  
 dioxo-1(2H)-pyrimidinebutanoylglycyl-(αS)-α-amino-3,4-dihydro-  
 5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-(αS)-α-amino-  
 3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-(αS)-  
 (CA INDEX NAME)

Absolute stereochemistry.

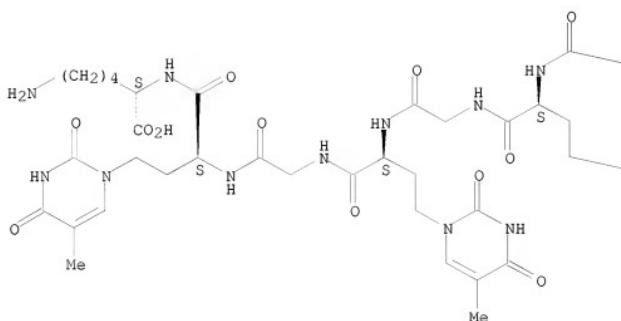
PAGE 1-A



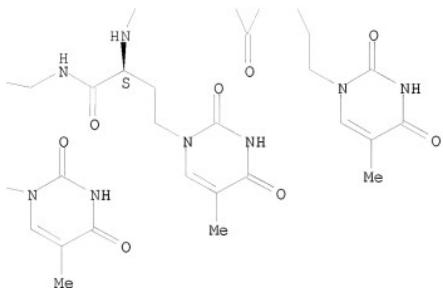
PAGE 1-B



PAGE 2-A



PAGE 2-B



OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 66 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1998:20018 CAPLUS  
 DN 128:128224  
 OREF 128:25195a,25198a  
 TI A cytosine analog containing a conformationally flexible acyclic linker for triplex formation at sites with contiguous G-C base pairs  
 AU Xiang, Guobing; McLaughlin, Larry W.  
 CS Department of Chemistry, Merkert Chemistry Center, Boston College, Chestnut Hill, MA, 02167, USA  
 SO Tetrahedron (1998), 54(3/4), 375-392  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 AB Two nucleoside derivs. of the pyrimidine bases, e.g. I, have been prepared with flexible acyclic carbohydrate linkers. A new procedure, beginning with (R)-(-)-2,2-dimethyl-1,3-dioxolane-4-methanol permits the preparation of the stereochem. pure acyclic derivs. of both protected nucleoside analogs without contamination by a problematic rearrangement product. By simply increasing the flexibility of the carbohydrate portion of I nucleoside derivative, 15-mer triplexes containing five contiguous G-C base pairs exhibit

a

7-8 °C increase in  $T_m$  value.

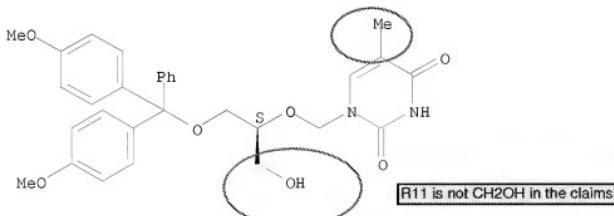
IT 124318-82-7P 201732-39-0P 201732-40-3P  
 201732-41-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and thermal stability of acyclic linker cytosine analog-containing DNA)

RN 124318-82-7 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1S)-2-[bis(4-methoxyphenyl)phenylmethoxy]-1-(hydroxymethyl)ethoxy]methyl- (CA INDEX NAME)

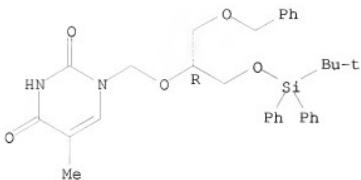
Absolute stereochemistry. Rotation (-).



RN 201732-39-0 CAPLUS

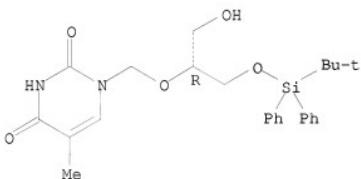
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R)-1-[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-2-(phenylmethoxy)ethoxy)methyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.



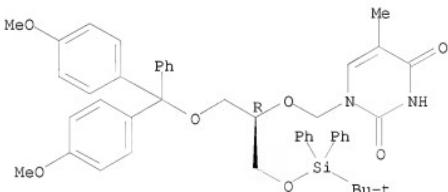
RN 201732-40-3 CAPLUS  
CN 2,4-(1H,3H)-Pyrimidinedione, 1-[(2-[(1,1-dimethylethyl)diphenylsilyl]oxy)-1-(hydroxymethyl)ethoxy]methyl-5-methyl-, (R)- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.



RN 201732-41-4 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R)-2-[bis(4-methoxyphenyl)phenylmethoxy]-1-[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]ethoxy]methyl]-5-methyl-(CA INDEX NAME)

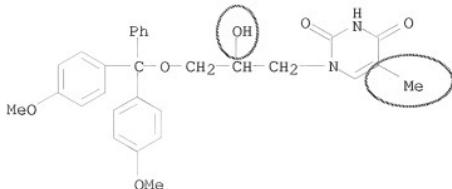
## Absolute stereochemistry.



OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)  
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 67 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1998:1278 CAPLUS  
 DN 128:85149  
 OREF 128:16521a,16524a  
 TI Synthetic Unrandomization of Random oligomer Fragments (SURF), a nonenzymic method for determining oligomers with specific target activity  
 IN Cook, Phillip Dan; Ecker, David J.; Wyatt, Jacqueline; Bruice, Thomas W.; Anderson, Kevin; Hanecak, Ronnie; Vickers, Timothy; Davis, Peter; Freier, Susan M.; Sanghvi, Yogesh S.; Brown-driver, Vickie  
 PA Isis Pharmaceuticals, Inc., USA  
 SO U.S., 37 pp., Cont.-in-part of U.S. Ser. No. 196,103.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 4

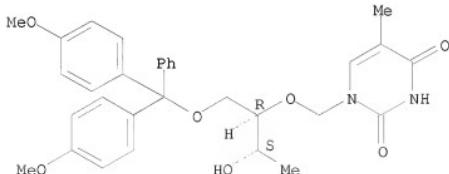
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5698391	A	19971216	US 1994-357396	19941216
	US 5672472	A	19970930	US 1994-196103	19940222
	US 5747253	A	19980505	US 1995-386141	19950208
PRAI	US 1991-749000	B2	19910823		
	US 1994-196103	A2	19940222		
	WO 1992-US7121	W	19920821		
	US 1994-357396	A2	19941216		
AB	Methods useful for the determination of oligomers which have specific activity for				
	a target mol. from a pool of primarily randomly assembled oligomers are provided. The disclosed methods involve repeated syntheses of increasingly simplified sets of oligomers coupled with selection procedures for determining oligomers having the highest activity. Freedom from the use of enzymes allows the application of these methods to any mols. which can be oligomerized in a controlled fashion. Synthesis of monomers for use in preparation of oligonucleotide analogs was described. Use of SURF to produce oligonucleotides and analogs which inhibited herpes simplex virus 1 or HIV, or which bound to endothelin-1 or leukotriene B <sub>4</sub> , etc. were reported.				
IT	171406-23-8P				
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
	(synthetic Unrandomization of Random oligomer Fragments (SURF), nonenzymic method for determining oligomers with specific target activity)				
RN	171406-23-8 CAPLUS				
CN	2,4(1H,3H)-Pyrimidinedione, 1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)				



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

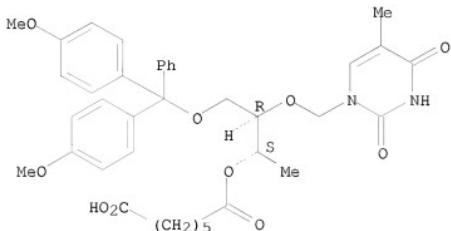
L11 ANSWER 68 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1997:568924 CAPLUS  
 DN 127:262991  
 OREF 127:51373a,51376a  
 TI Synthesis and properties of 2'-deoxy-1',2'-seco-D-ribosyl (5'→3')oligonucleotides (= 1',2'-seco-DNA) containing adenine and thymine  
 AU Peng, Ling; Roth, Hans Jorg  
 CS Lab. Organic Chem., Swiss Federal Institute Technology, Zurich, CH-8092, Switz.  
 SO Helvetica Chimica Acta (1997), 80(5), 1494-1512  
 CODEN: HCACAV; ISSN: 0018-019X  
 PB Verlag Helvetica Chimica Acta  
 DT Journal  
 LA English  
 AB Some 2'-deoxy-1',2'-seco-D-ribosyl (5'→3')oligonucleotides (= 1',2'-seco-DNA), differing from natural DNA only by a bond scission between the centers C(1') and C(2'), were synthesized and studied to compare their structure properties and pairing behavior with those of corresponding natural DNA and homo-DNA oligonucleotides (2',3'-dideoxy- $\beta$ -glucopyranosyl oligonucleotides). Starting from (-)-D-tartaric acid, N6-benzoyl-2'-deoxy-1',2'-secoadenosine and 2'-deoxy-1',2'-secothymidine were obtained in pure crystalline form. Using the phosphoramidite variant of the phosphite-triester method, a dinucleotide monophosphate 1',2'-seco-d(T2) was synthesized in solution, while oligonucleotides 1',2'-seco-d(AT6), 1',2'-seco-d(A10) and 1',2'-seco-d(T10) were prepared on solid phase with either automated or manual techniques. Results of UV, CD, and gel-electrophoretic studies indicated that neither adenine-thymine base pairing (as observed in natural DNA and homo-DNA), nor the adenine-adenine base pairing (as observed in homo-DNA) was effective in 1',2'-seco-DNA. Furthermore, hybrid pairing was observed neither between 1',2'-seco-DNA and natural DNA nor between 1',2'-seco-DNA and homo-DNA.  
 IT 195512-85-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and properties of adenine- and thymine-containing deoxysecoribosyl oligonucleotides)  
 RN 195512-85-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,2S)-1-[(bis(4-methoxyphenyl)phenylmethoxy)methyl]-2-hydroxypropoxy]methyl]-5-methyl-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 195512-93-7DP, polymer-supported  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis and properties of adenine- and thymine-containing  
 deoxysecoribosyl oligonucleotides)  
 RN 195512-93-7 CAPLUS  
 CN Heptanedioic acid, 1-[*(1S,2R)*-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-  
 [*(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy*]-1-  
 methylpropyl] ester (CA INDEX NAME)

Absolute stereochemistry.

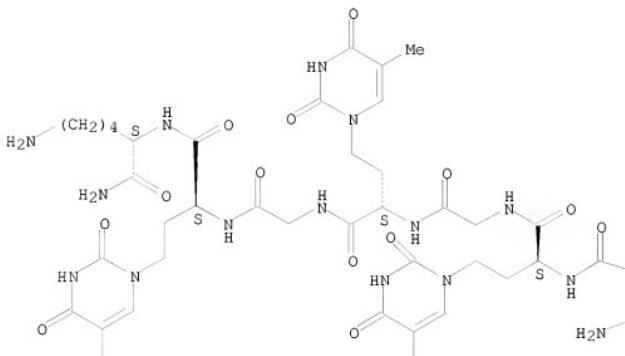


OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

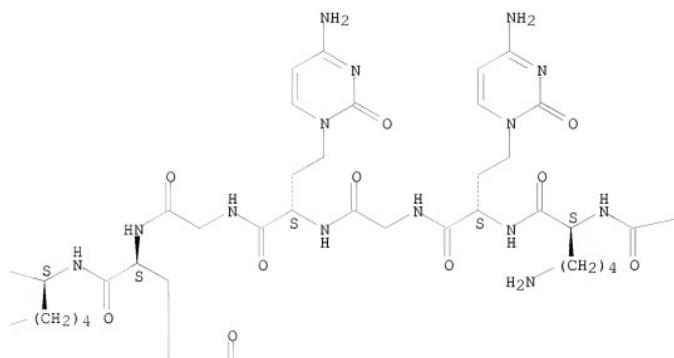
L11 ANSWER 69 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1997:533245 CAPLUS  
 DN 127:220967  
 OREF 127:43072h,43073a  
 TI  $\alpha$ -PNA: a novel peptide nucleic acid analog of DNA  
 AU Howarth, Nicola M.; Wakelin, Laurence P. G.  
 CS Cancer Drug Discovery, Dep. Chem., Univ. Coll. Dublin, Dublin, Ire.  
 SO Journal of Organic Chemistry (1997), 62(16), 5441-5450  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 127:220967  
 AB Peptide nucleic acid (PNA) analogs of DNA have attracted interest as potential pharmacol. regulators of gene expression since they have the capacity to invade duplex DNA forming Watson-Crick base paired PNA:DNA heteroduplexes. Unfortunately, strand invasion is limited to homopurine and homopyrimidine sequences and there is the need to explore further PNA analogs for the purpose of expanding the strand invasion alphabet. Accordingly, a true peptide mimic of DNA (designated  $\alpha$ -PNA) was designed, involving novel L- $\alpha$ -amino acids, with side chains comprising the four DNA bases attached via an ethylene linkage, interspaced with glycine. The four base-containing amino acids have been synthesized from N-Boc-L-homoserine, via alkylation of the appropriate base with the key intermediate (S)-2-(N-Boc-amino)-4-bromobutyric acid Me ester followed by hydrolysis. These amino acids have been incorporated into  $\alpha$ -PNA oligomers using both solution and solid phase methods.  
 IT 194920-19-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
     (preparation of novel backbone-attached peptide nucleic acid building blocks)  
 RN 194920-19-9 CAPLUS  
 CN L-Lysinamide, ( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoyl-L-lysyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-lysyl-( $\alpha$ S)- $\alpha$ ,4-diamino-2-oxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-L-lysyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoylglycyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl-( $\alpha$ S)- $\alpha$ -amino-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinebutanoyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

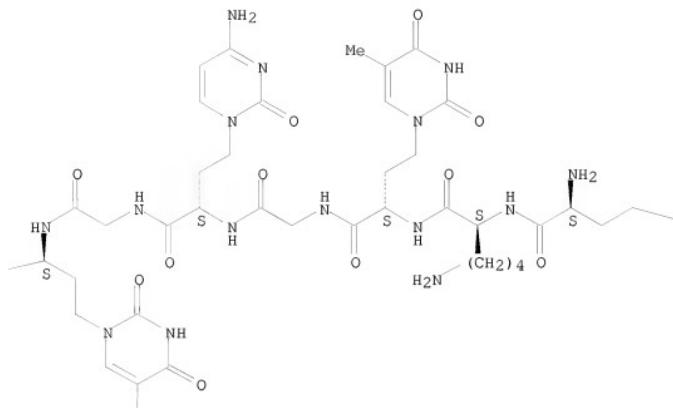
PAGE 1-A



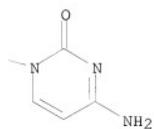
PAGE 1-B



PAGE 1-C



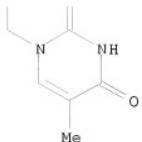
PAGE 1-D



PAGE 2-A



PAGE 2-B



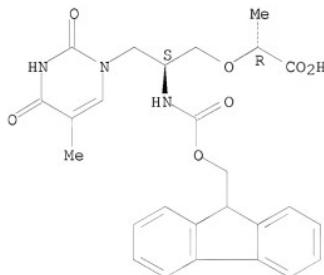
PAGE 2-C

Me  
|  
Me

OSC.G 56 THERE ARE 56 CAPLUS RECORDS THAT CITE THIS RECORD (56 CITINGS)  
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

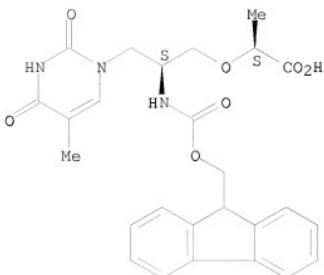
L11 ANSWER 70 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1997:357092 CAPLUS  
 DN 127:95569  
 OREF 127:18405a,18408a  
 TI Novel polyamide based nucleic acid analogs - synthesis of oligomers and RNA-binding properties  
 AU Garcia-Echeverria, Carlos; Huesken, Dieter; Chiesi, Chantal Schmit; Altmann, Karl-Heinz  
 CS Central Research Laboratories, and Pharmaceutical Research, Oncology Dep., CIBA, USA  
 SO Bioorganic & Medicinal Chemistry Letters (1997), 7(9), 1123-1126  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PB Elsevier  
 DT Journal  
 LA English  
 AB The synthesis of novel polyamide based nucleic acid analogs incorporating monomer units of type I ( $R = H, Me$ ) and II has been accomplished using solid-phase strategies based on N-9-fluorenylmethoxycarbonyl (Fmoc) protected building blocks. An oligomer composed of monomer units I ( $R = H$ ) exhibited weak, but sequence-specific RNA binding. Improved RNA-binding affinity was observed for analogs incorporating building blocks of type I [ $R = (R)-Me$ ], but not in the case of I [ $R = (S)-Me$ ].  
 IT 191655-42-2 191655-60-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and RNA binding affinity of novel polyamide-based nucleic acid analogs)  
 RN 191655-42-2 CAPLUS  
 CN Propanoic acid, 2-[(2S)-3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(9H-fluoren-9-ylmethoxy)carbonyl]amino]propoxy]-, (2R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 191655-60-4 CAPLUS  
 CN Propanoic acid, 2-[(2S)-3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(9H-fluoren-9-ylmethoxy)carbonyl]amino]propoxy]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

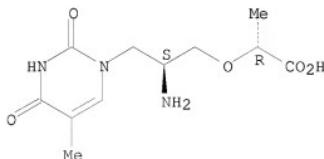
L11 ANSWER 71 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1997:357090 CAPLUS  
 DN 127:81743  
 OREF 127:15685a  
 TI Polyamide based nucleic acid analogs - synthesis of  $\delta$ -amino acids with nucleic acid bases bearing side chains  
 AU Altmann, Karl-Heinz; Chiesi, Chantal Schmit; Garcia-Echeverria, Carlos  
 CS Central Research Laboratories, and Pharmaceutical Research Division,  
 Oncology Dep., CIBA, USA  
 SO Bioorganic & Medicinal Chemistry Letters (1997), 7(9), 1119-1122  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PB Elsevier  
 DT Journal  
 LA English  
 OS CASREACT 127:81743  
 AB Nucleoamino acids of type I ( $R = H, Me$ ) and II have been synthesized, which can serve as building blocks for novel polyamide based nucleic acid analogs. Key steps in the syntheses are the alkylation of protected serinol and homoserinol with tert-Bu bromoacetate or tert-Bu bromopropionate under phase transfer conditions and the introduction of thymidine or uracil into the amino acid side chains by way of a Mitsunobu reaction. Cytosine derivs. were prepared through uracil to cytosine base conversion at the stage of N-tert-butoxycarbonyl protected amino acid tert-Bu esters.  
 IT 191655-41-1P 191655-54-6P 191655-55-7P  
 191655-56-8P 191655-59-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of amino acids with nucleic acid base-containing side chains)  
 RN 191655-41-1 CAPLUS  
 CN Propanoic acid, 2-[(2S)-2-amino-3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)propoxy]-, (2R)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 191655-40-0

CMF C11 H17 N3 O5

Absolute stereochemistry.



CM 2

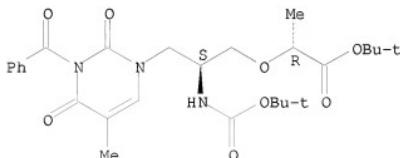
CRN 76-05-1

CMF C2 H F3 O2



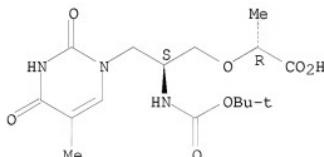
RN 191655-54-6 CAPLUS  
 CN Propanoic acid, 2-[(2S)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(1,1-dimethylethoxy)carbonyl]amino]propoxyl-, 1,1-dimethylethyl ester, (2R)- (CA INDEX NAME)

Absolute stereochemistry.



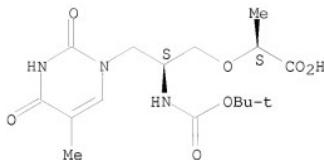
RN 191655-55-7 CAPLUS  
 CN Propanoic acid, 2-[(2S)-3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(1,1-dimethylethoxy)carbonyl]amino]propoxyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 191655-56-8 CAPLUS  
 CN Propanoic acid, 2-[(2S)-3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(1,1-dimethylethoxy)carbonyl]amino]propoxyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 191655-59-1 CAPLUS

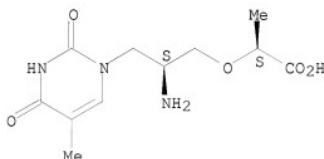
CN Propanoic acid, 2-[(2S)-2-amino-3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)propoxy]-, (2S)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 191655-58-0

CMF C11 H17 N3 O5

Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



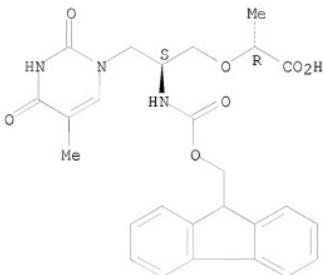
IT 191655-42-2P 191655-60-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of amino acids with nucleic acid base-containing side chains)

RN 191655-42-2 CAPLUS

CN Propanoic acid, 2-[(2S)-3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(9H-fluoren-9-ylmethoxy)carbonyl]amino]propoxy]-, (2R)- (CA INDEX NAME)

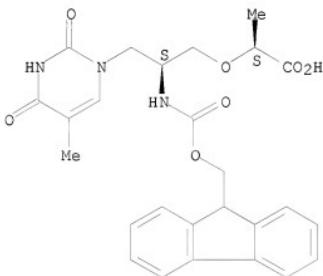
Absolute stereochemistry.



RN 191655-60-4 CAPLUS

CN Propanoic acid, 2-[(2S)-3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(9H-fluoren-9-ylmethoxy)carbonyl]amino]propoxy]-, (2S)- (CA INDEX NAME)

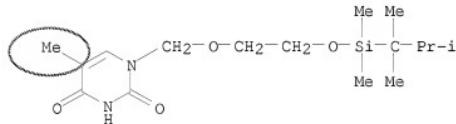
Absolute stereochemistry.



OSC.G 18  
RE.CNT 25

THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)  
THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 72 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1997:320918 CAPLUS  
 DN 126:325005  
 OREF 126:62967a,62970a  
 TI Synthesis and Anti-HIV Activity of Novel N-1 Side Chain-Modified Analogs of 1-[(2-Hydroxyethoxy)methyl]-6-(phenylthio)thymine (HEPT)  
 AU Pontikis, Renee; Benhida, Rachid; Aubertin, Anne-Marie; Grierson, David S.; Monneret, Claude  
 CS Section Recherche, Institut Curie, Paris, 75231, Fr.  
 SO Journal of Medicinal Chemistry (1997), 40(12), 1845-1854  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB A series of 33 N-1 side chain-modified analogs of HEPT were synthesized and evaluated for their anti-HIV-1 activity. In particular, the effect of substitution of the terminal hydroxy group of the acyclic structure of HEPT and the structural rigidity of this side chain were investigated. Halo, azido, and amino derivs. were prepared from HEPT via the p-tosylate derivative. Acylation of the primary amine afforded the amido analogs. Diaryl derivs. were prepared by reaction of HEPT, or of the 6-(2-pyridylthio) analog, with diaryl disulfides in the presence of tri-n-butylphosphine. Compds. in which the N-1 side chain is rigidified by incorporation of an E-configured double bond, were obtained by palladium(0)-catalyzed coupling of several different 6-(arylothio)uracil derivs. with allyl acetates. Compds. incorporating an aromatic ring at the end of the acyclic side chain, were more potent than the known diphenyl-substituted HEPT analog BPT, 2 of them, being 10-fold more active.  
 IT 189637-39-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and anti-HIV activity of hydroxyethoxymethyl(phenylthio)thymine analogs)  
 RN 189637-39-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(dimethyl(1,1,2-trimethylpropyl)silyloxy)ethoxy]methyl]-5-methyl- (CA INDEX NAME)

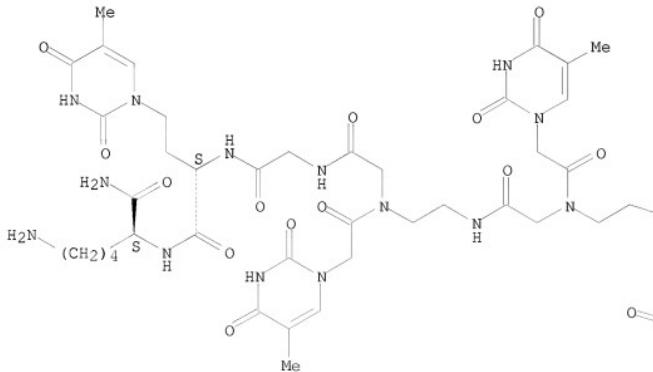


OSC.G 47 THERE ARE 47 CAPLUS RECORDS THAT CITE THIS RECORD (48 CITINGS)  
 RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

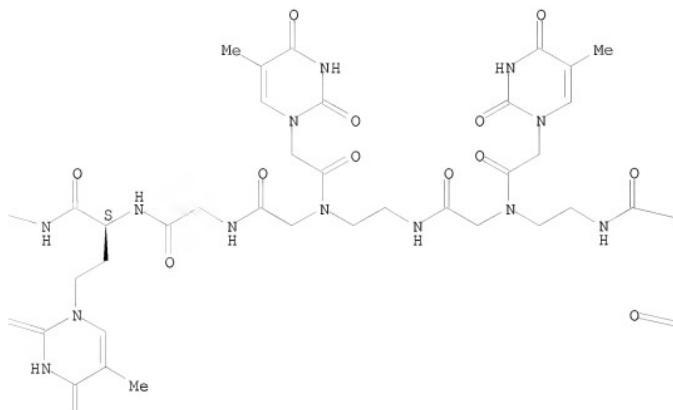
L11 ANSWER 73 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1997:219832 CAPLUS  
 DN 126:305772  
 OREF 126:59235a,59238a  
 TI New hetero-oligomeric peptide nucleic acids with improved binding properties to complementary DNA  
 AU Jordan, Stephan; Schwemler, Christoph; Kosch, Winfried; Kretschmer, Axel;  
 Stropp, Udo; Schwenner, Eckhardt; Mielke, Burkhard  
 CS Central Research, Bayer AG, Leverkusen, D-51368, Germany  
 SO Bioorganic & Medicinal Chemistry Letters (1997), 7(6), 687-690  
 CODEN: BMCLB8; ISSN: 0960-894X  
 PB Elsevier  
 DT Journal  
 LA English  
 AB Hetero-oligomeric PNAs consisting of new monomeric building blocks L-trans-I, L-cis-I, D-trans-I, II, and III (X = O) and various amts. of N-(2-aminoethyl)glycine (IV) have been synthesized by solid-phase chemical Some of these new compds. show stronger binding to complementary DNA than the original PNAs, and are consequently very interesting candidates as antisense compds. for applications in therapy and in diagnostics.  
 IT 189253-86-9P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of new hetero-oligomeric peptide nucleic acids with improved binding properties to complementary DNA)  
 RN 189253-86-9 CAPLUS  
 CN Peptide nucleic acid, (H-T-T-Gly-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-(2S)-2-aminobutanoyl-T-T-Gly-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-(2S)-2-aminobutanoyl-T-T-Gly-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-(2S)-2-aminobutanoyl-T-T-Gly-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-(2S)-2-aminobutanoyl)-Lys-NH<sub>2</sub> (9CI) (CA INDEX NAME)

Absolute stereochemistry.

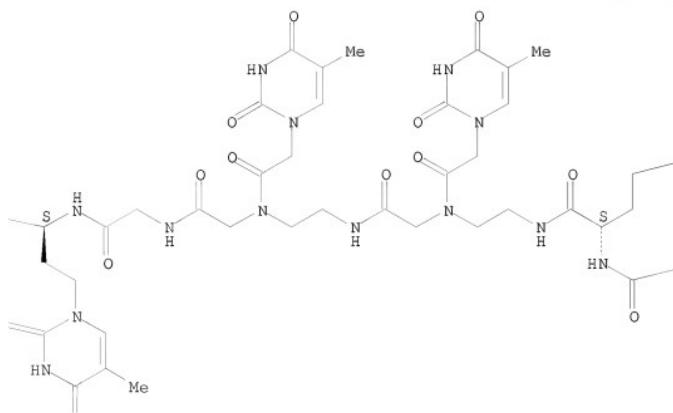
PAGE 1-A



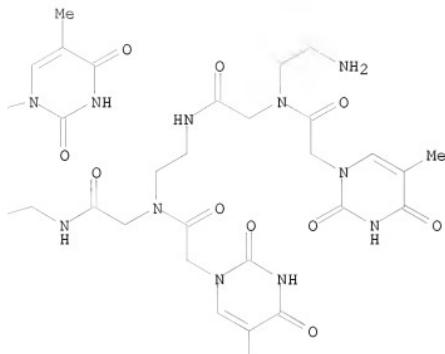
PAGE 1-B



PAGE 1-C



PAGE 1-D



PAGE 2-B

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PAGE 2-C

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O

PAGE 2-D

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OSC.G 43      THERE ARE 43 CAPLUS RECORDS THAT CITE THIS RECORD (44 CITINGS)  
 RE.CNT 19      THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

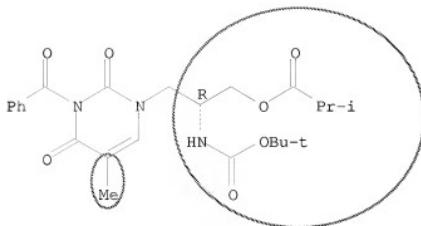
L11 ANSWER 74 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1996:473097 CAPLUS  
 DN 125:143231  
 OREF 125:26829a,26832a  
 TI Preparation of amino acid-nucleic acid compounds.  
 IN Ramasamy, Kandasamy; Wang, Guangyi; Seifert, Wilfried  
 PA Icn Pharmaceuticals, USA  
 SO PCT Int. Appl., 143 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

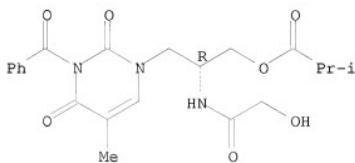
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9614330	A1	19960517	WO 1995-US14599	19951102
	W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA	2202274	A1	19960517	CA 1995-2202274	19951102
AU	9642341	A	19960531	AU 1996-42341	19951102
AU	693622	B2	19980702		
EP	789707	A1	19970820	EP 1995-940671	19951102
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN	1171112	A	19980121	CN 1995-196989	19951102
HU	77435	A2	19980428	HU 1997-2053	19951102
HU	218086	B	20000528		
JP	10508312	T	19980818	JP 1995-515518	19951102
RU	2154638	C2	20000820	RU 1997-108680	19951102
PL	185852	B1	20030829	PL 1995-320084	19951102
PRAI	US 1994-333895	A	19941102		
	WO 1995-US14599	W	19951102		
AB	R3CHBCONR[CHR1(OH)]CHR2OH, R3CHBCHR4NRCH[CHR1(OH)]CHR2OH, BZNRXCH[CHR1(OH)]CHR2OH, etc. [B = nucleoside base; R-R2 = H, OH, SH, CN, Me, OMe, SMe, ONH2, Ph, etc.; X, Z = (CH2)x, CO, CS, O, S, SO, SO2, NH, NOH, NMe, etc.; x = 1-7], were prepared as intermediates for oligonucleotide analogs. The oligonucleotide analogs are claimed, but no synthetic data for them are given. Thus, N-tert-butoxycarbonyl-O-benzyl-D-serinol (preparation given) was stirred with CF3CO2H in CH2Cl2 and the crude product was added to a mixture of thymineacetic acid (preparation given), N-methylmorpholine, and iso-Bu chloroformate in DMF to give 54% intermediate (I). I was hydrogenolyzed, dimethoxytritylated, and phosphitylated to give title compound (II).				
IT	179472-14-1P	179472-15-2P	179472-16-3P		
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
	(preparation of amino acid-nucleic acid compds.)				
RN	179472-14-1	CAPLUS			
CN	Propanoic acid, 2-methyl-, (2R)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4- dioxo-1(2H)-pyrimidinyl)-2-[(1,1-dimethylethoxy)carbonyl]aminolpropyl ester (CA INDEX NAME)				

Absolute stereochemistry.



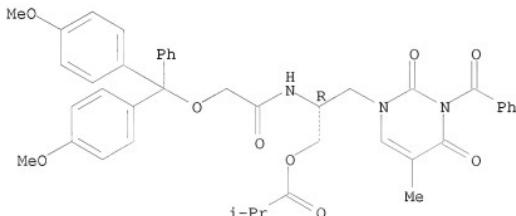
RN 179472-15-2 CAPLUS  
 CN Propanoic acid, 2-methyl-, (2R)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[(hydroxyacetyl)amino]propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 179472-16-3 CAPLUS  
 CN Propanoic acid, 2-methyl-, (2R)-3-(3-benzoyl-3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-2-[[[bis(4-methoxyphenyl)methoxymethyl]acetyl]amino]propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



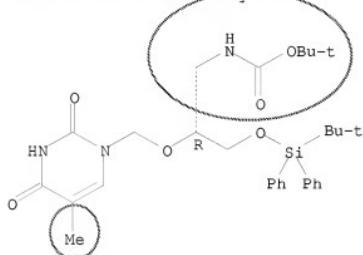
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 75 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1996:431361 CAPLUS  
 DN 125:115077  
 OREF 125:21623a,21626a  
 TI Preparation of novel antisense nucleotide analogs containing acyclic nucleoside analogs  
 IN Imanishi, Takeshi; Obika, Satoshi  
 PA Japan  
 SO PCT Int. Appl., 53 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9606833	A1	19960307	WO 1995-JP1729	19950831
	W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, KE, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9533545	A	19960322	AU 1995-33545	19950831
	JP 0811945	A	19960514	JP 1995-222886	19950831
PRAI	JP 1994-207343	A	19940831		
	WO 1995-JP1729	W	19950831		
AB	Antisense mols. represented by the following general formulas (I, II, and III; B1, B2 = the same or different pyrimidine or purine nucleic acid base or a derivative thereof; X, Y = oxygen or sulfur; R = H, alkyl, or acyl; W = H, alkyl, or acyl, or when X = oxygen, W = nucleotide, oligonucleotide, or polynucleotide bonded via a phosphate linkage; n = an integer of 1 to 50, provided when n ≥ 2, B1 or B2 may be different from each other), which contain carbamate or thiocarbamate internucleotide linkages and acyclic nucleosides that alleviate the structural strain during the formation of a double strand and also suppress the manifestation of toxicity since they release glycerin derivs. in vivo decomposition or metabolization, are prepared. Thus, a 12-mer 5'-GGCTTT-Tt-GCT-3' (Tt = Q, B1 = B2 = T) was prepared by the solid phase phosphoramidite method using a Pharmacia DNA synthesizer Gene Assembler Plus, and a heterodimer unit amide (IV) [preparation from (S)-glycidol given]. 13-Mers 5'-CTTTTTTT-Tt-G-3', 5'-CTTT-Tt-TTTG-3', and 5'-C-Tt-Tt-Tt-Tt-Tt-TG-3' in vitro showed resistance to degradation by snake venom phosphodiesterase (exonuclease). A 21-mer 5'-GCAG-Cc-TCCCTCCCATG-Cc-A-3' (Cc = Q, B = B = C) at 1 μM in vitro inhibited the expression of human soluble IL-6R in CHO.SR344 cells to 180 ng/mL from 240 ng/mL (control).				
IT	173465-40-2P	173465-43-5P	173465-46-8P		
	173465-47-9P	173465-48-0P	173465-49-1P		
	173465-60-6P	173465-62-8P	173465-64-0P		
	173465-65-1P	173465-66-2P	178748-33-9P		
	178748-35-1P	178748-36-2P	178748-39-5P		
RL:	RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of novel antisense nucleotide analogs containing acyclic nucleoside analogs and carbamate or thiocarbamate internucleotide linkages)				
RN	173465-40-2 CAPLUS				

CN Carbamic acid, [2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

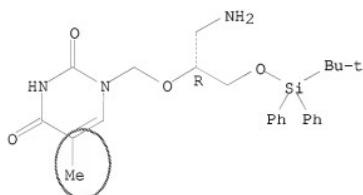
Absolute stereochemistry.



RN 173465-43-5 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-amino-1-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]ethoxy]methyl]-5-methyl-, (R)- (9CI) (CA INDEX NAME)

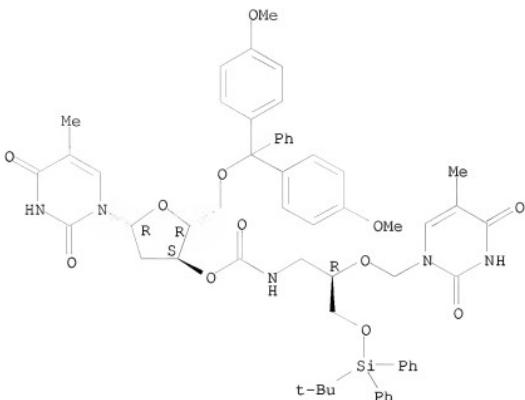
Absolute stereochemistry.



RN 173465-46-8 CAPLUS

CN Thymidine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-, 3'-[[2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]carbamate], (R)- (9CI) (CA INDEX NAME)

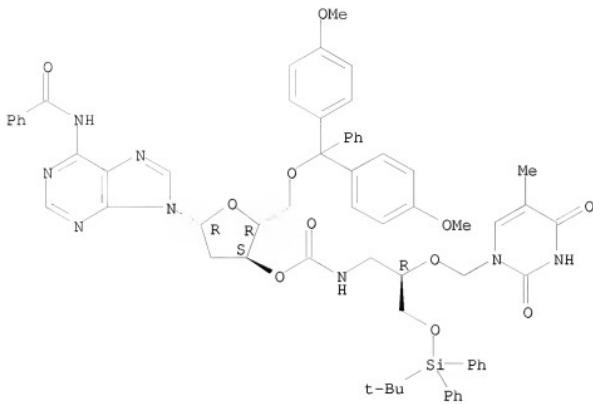
Absolute stereochemistry.



RN 173465-47-9 CAPLUS

CN Adenosine, N-benzoyl-5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-, 3'-(2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[[[(1,1-dimethylallyl)diphenylsilyloxy]propyl]carbamate], (R)- (9CI) (CA INDEX NAME)

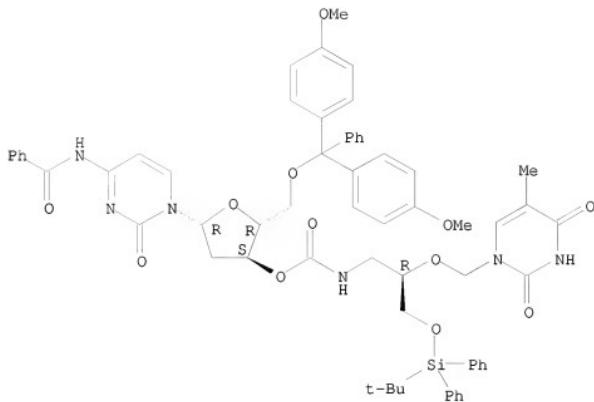
Absolute stereochemistry.



RN 173465-48-0 CAPLUS

CN Cytidine, N-benzoyl-5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-,  
 3'-(2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-  
 [[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]carbamate], (R)- (9CI) (CA  
 INDEX NAME)

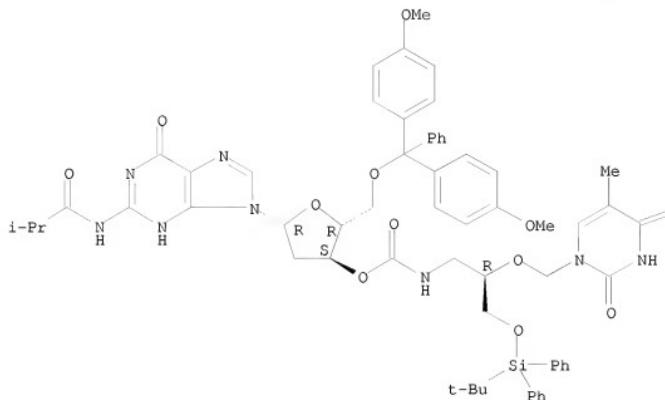
Absolute stereochemistry.



RN 173465-49-1 CAPLUS  
 CN Guanosine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-N-(2-methyl-1-oxopropyl)-, 3'-[[2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]carbamate], (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

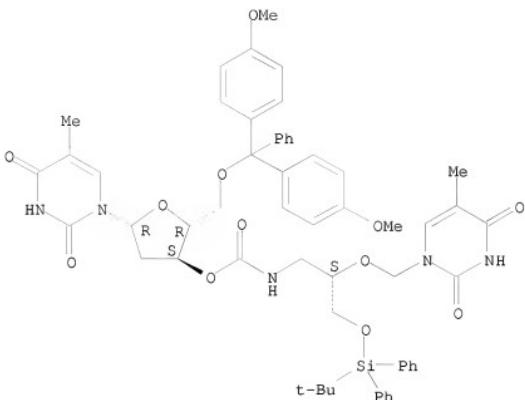


PAGE 1-B

 $\equiv O$ 

RN 173465-60-6 CAPLUS  
 CN Thymidine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-,  
 3'-[{2-[{(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy}-3-  
 [{(1,1-dimethylethyl)diphenylsilyl}oxy]propyl]carbamate], (S)- (9CI) (CA  
 INDEX NAME)

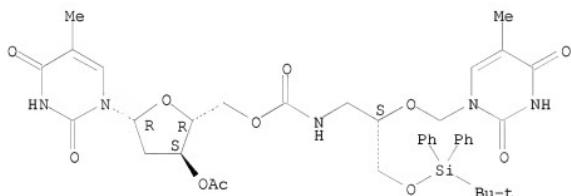
Absolute stereochemistry.



RN 173465-62-8 CAPLUS

CN Thymidine, 3'-acetate 5'-(2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy)propyl carbamate], (S)- (9CI) (CA INDEX NAME)

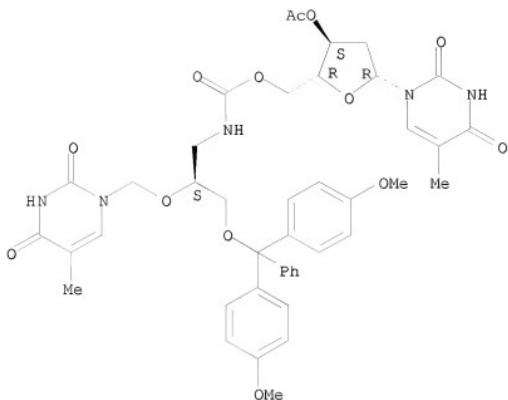
Absolute stereochemistry.



RN 173465-64-0 CAPLUS

CN Thymidine, 3'-acetate 5'-(3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl carbamate], (S)- (9CI) (CA INDEX NAME)

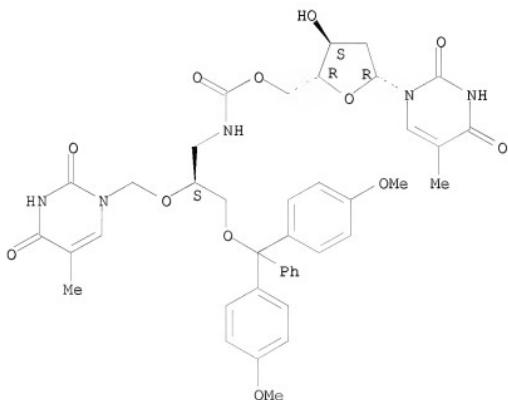
Absolute stereochemistry.



RN 173465-65-1 CAPLUS

CN Thymidine, 5'-(3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl)carbamate, (S)- (9CI)  
 (CA INDEX NAME)

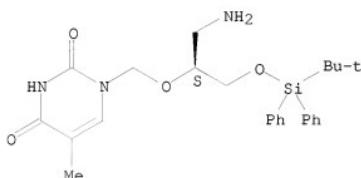
Absolute stereochemistry.



RN 173465-66-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[{2-amino-1-[(1,1-dimethylethyl)diphenylsilyl]oxy}methyl]ethoxy)methyl-, (S)-  
(9CI) (CA INDEX NAME)

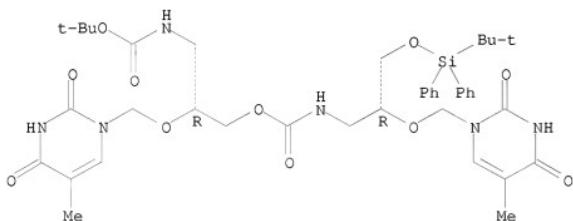
Absolute stereochemistry.



RN 178748-33-9 CAPLUS

CN 6,12-Dioxa-2,8-diaza-13-silapentadecanoic acid,  
4,10-bis[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-14,14-dimethyl-7-oxo-13,13-diphenyl-, 1,1-dimethylethyl ester, [R-(R\*,R\*)]-  
(9CI) (CA INDEX NAME)

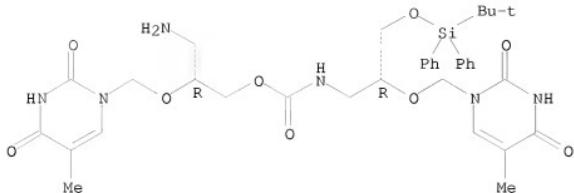
Absolute stereochemistry.



RN 178748-35-1 CAPLUS

CN Carbamic acid, [2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]-, 3-amino-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl ester, [R-(R\*,R\*)]- (9CI) (CA INDEX NAME)

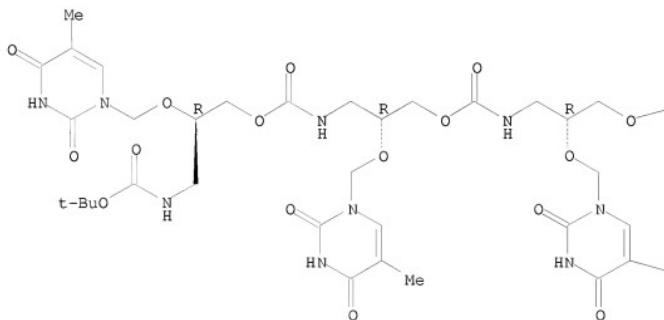
Absolute stereochemistry.

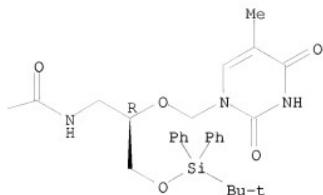


RN 178748-36-2 CAPLUS  
 CN 6,12,18,24-Tetraoxa-2,8,14,20-tetraaza-25-silaheptacosanoic acid,  
 4,10,16,22-tetrakis[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-  
 pyrimidinyl)methoxy]-26,26-dimethyl-7,13,19-trioxo-25,25-diphenyl-,  
 1,1-dimethylethyl ester, [4R-(4R\*,10R\*,16R\*,22R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



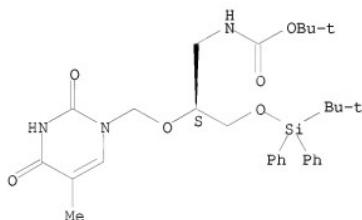


Me

RN 178748-39-5 CAPLUS

CN Carbanic acid, [2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

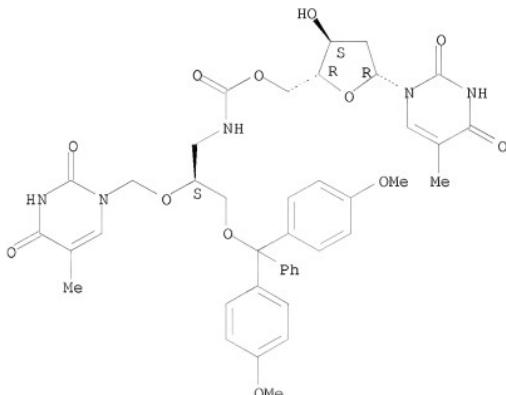
Absolute stereochemistry.



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 76 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1996:398905 CAPLUS  
 DN 125:168550  
 OREF 125:31597a,31600a  
 TI Properties of novel oligonucleotide analogs containing an acyclic nucleoside and a carbamate linkage  
 AU Obika, Satoshi; Takashima, Yoshihiro; Matsumoto, Yasuhide; Shimoyama, Atsuko; Koishihara, Yasuo; Ohsugi, Yoshiyuki; Doe, Takefumi; Imanishi, Takeshi  
 CS Faculty Pharmaceutical Sci., Osaka Univ., Osaka, 565, Japan  
 SO Bioorganic & Medicinal Chemistry Letters (1996), 6(12), 1357-1360  
 CODEN: BMCL8; ISSN: 0960-894X  
 PB Elsevier  
 DT Journal  
 LA English  
 AB Novel heterodimers containing an acyclic nucleoside and a carbamate linkage were incorporated into oligonucleotides, and the melting temps. of the DNA-DNA and DNA-RNA duplexes as well as the nuclease resistance of the modified oligonucleotides were studied.  
 IT 173465-65-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
     (preparation and phosphodiesterase resistance of novel oligodeoxyribonucleotide analog duplexes containing an acyclic nucleoside and a carbamate linkage)  
 RN 173465-65-1 CAPLUS  
 CN Thymidine, 5'-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl]carbamate, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)



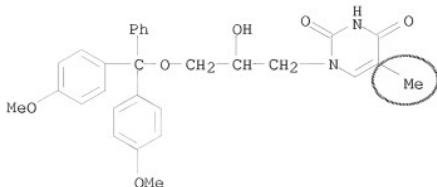
L11 ANSWER 77 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1996:323791 CAPLUS  
 DN 125:87113  
 OREF 125:16456h,16457a  
 TI Carbocation scavenging during oligonucleotide synthesis  
 IN Ravikumar, Vasulinga; Andrade, Mark; Mulvey, Dennis; Cole, Douglas L.  
 PA Isis Pharmaceuticals, Inc., USA  
 SO U.S., 12 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5510476	A	19960423	US 1994-271181	19940707
US 5714597	A	19980203	US 1996-613036	19960308
PRAI US 1994-271181	A1	19940707		
OS MARPAT 125:87113				

AB A process is claimed for the synthesis of oligonucleotides comprising the steps of: (a) attaching a protected nucleoside to a solid support, said nucleoside protected at the 5'-O hydroxyl position with an acid labile protecting group that forms a carbocation upon cleavage with acid; (b) removing said 5' protecting group with an acidic solution containing a carbocation scavenging agent to give the free 5' hydroxyl; (c) washing said solid support to remove excess acid solution and scavenged carbocation; (d) reacting in the presence of a catalyst said free 5' hydroxyl with a nucleotide containing an active phosphite; (e) oxidizing the phosphite to a phosphate; (f) capping remaining reactive sites with a solution containing an acid anhydride; (g) repeating steps (b) through (f) at least once for subsequent couplings of addnl. nucleotides; and (h) cleaving said oligonucleotide from said solid support. A 46 μmole scale synthesis of 5'-TTG-CTT-CCA-TCT-TCC-TCG-TC-3' phosphorothioate was conducted on an automated synthesizer using the phosphoramidite method: in one synthesis deblocking of the 5'-O dimethoxytrityl protecting group was carried out using 3% dichloroacetic acid in dichloromethane; in the second synthesis a mixture of 3% dichloroacetic acid and 3% triethylsilane as a carbocation scavenger, in dichloromethane, was used to remove the dimethoxytrityl protecting group. The yields for the full length oligomers for the control and for the triethylsilane preps. were 76% and 84%, resp.

IT 171406-23-8P  
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (carbocation scavenging during oligonucleotide synthesis)

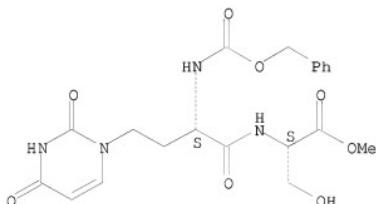
RN 171406-23-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)



OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

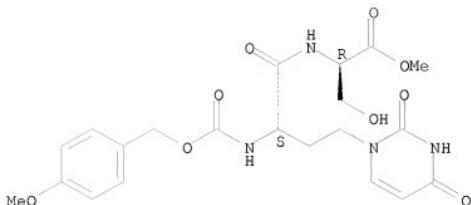
L11 ANSWER 78 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1996:109086 CAPLUS  
 DN 124:196605  
 OREF 124:36207a,36210a  
 TI Synthesis of oligopeptides as polynucleotide analogs  
 AU Umemiya, Hiroki; Kagechika, Hiroyuki; Hashimoto, Yuichi; Shudo, Koichi  
 CS Inst. of Molecular and Cellular Biosciences, Univ. of Tokyo, Tokyo, 113,  
 Japan  
 SO Nucleosides & Nucleotides (1996), 15(1-3), 465-75  
 CODEN: NUNUD5; ISSN: 0732-8311  
 PB Dekker  
 DT Journal  
 LA English  
 AB Several dipeptides which have a uracil moiety in their side chains were  
 designed as nucleotide analogs. Oligopeptides obtained from the  
 dipeptides as monomer units were water-soluble, but exhibited no hypochromic  
 effect with poly A or poly dA.  
 IT 174230-78-5P 174230-79-6P 174230-80-9P  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP  
 (Preparation); RACT (Reactant or reagent)  
 (synthesis of oligopeptides as polynucleotide analogs)  
 RN 174230-78-5 CAPLUS  
 CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-  
 [(phenylmethoxy)carbonyl]-L-2-aminobutanoyl-, methyl ester (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.



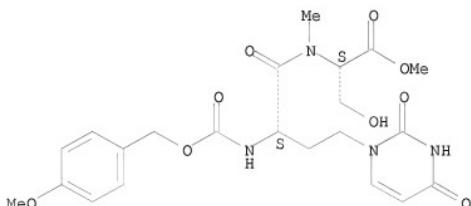
RN 174230-79-6 CAPLUS  
 CN D-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-  
 methoxyphenyl)methoxy]carbonyl]-L-2-aminobutanoyl-, methyl ester (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



RN 174230-80-9 CAPLUS  
 CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-methoxyphenyl)methoxy]carbonyl-L-2-aminobutanoyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

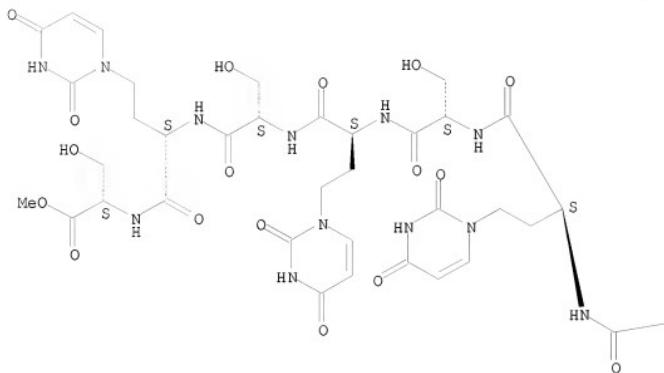
Absolute stereochemistry.



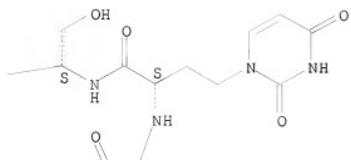
IT 174230-88-7P 174230-90-1P 174872-49-2P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis of oligopeptides as polynucleotide analogs)  
 RN 174230-88-7 CAPLUS  
 CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(phenylmethoxy)carbonyl]-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

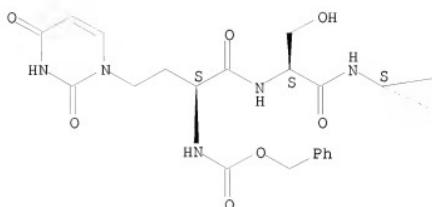
PAGE 1-A



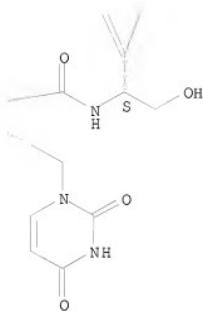
PAGE 1-B



PAGE 2-A



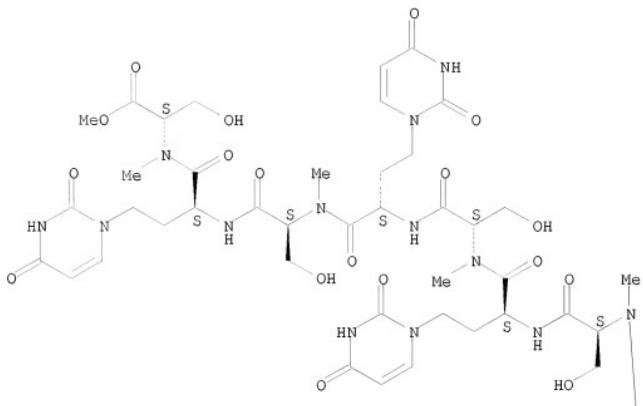
PAGE 2-B



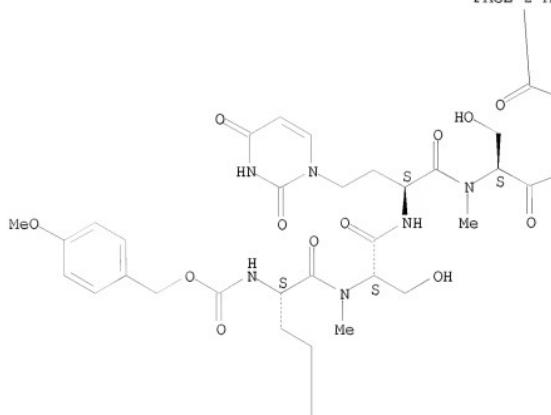
RN 174230-90-1 CAPLUS  
 CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-methoxyphenyl)methoxylcarbonyl]-L-2-aminobutanoyl-N-methyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-N-methyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-N-methyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-N-methyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

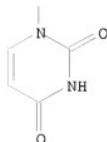
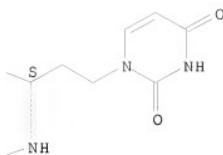
Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

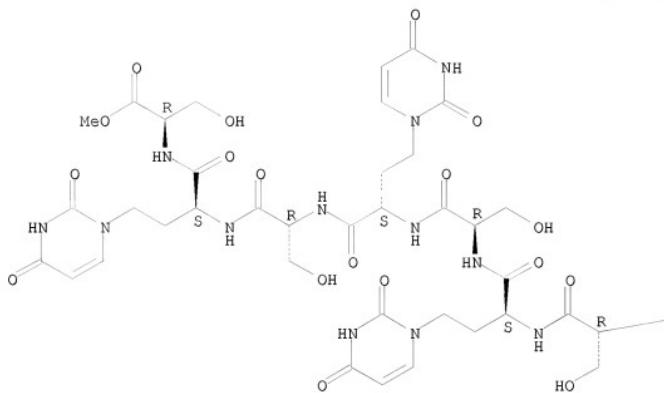




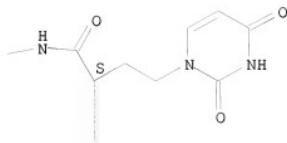
RN 174872-49-2 CAPLUS  
 CN D-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-methoxyphenyl)methoxy]carbonyl-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

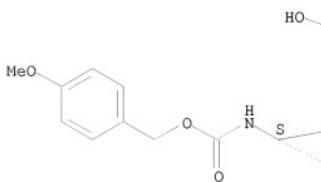
PAGE 1-A



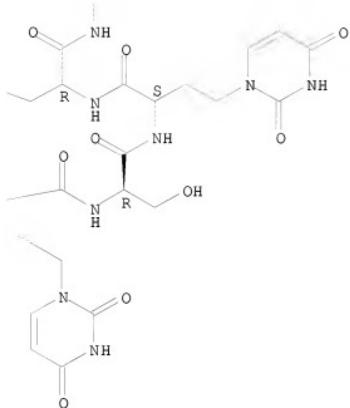
PAGE 1-B



PAGE 2-A



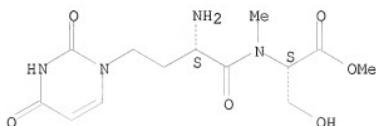
PAGE 2-B



- IT 174230-93-4P 174230-96-7P 174230-97-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of oligopeptides as polynucleotide analogs)
- RN 174230-93-4 CAPLUS
- CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-N-methyl-, methyl ester, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)
- CM 1

CRN 174230-92-3  
 CMF C13 H20 N4 O6

Absolute stereochemistry.



CM 2

CRN 76-05-1  
 CMF C2 H F3 O2

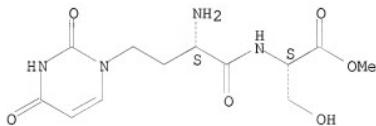


RN 174230-96-7 CAPLUS  
 CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-,  
 methyl ester, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 174230-95-6  
 CMF C12 H18 N4 O6

Absolute stereochemistry.



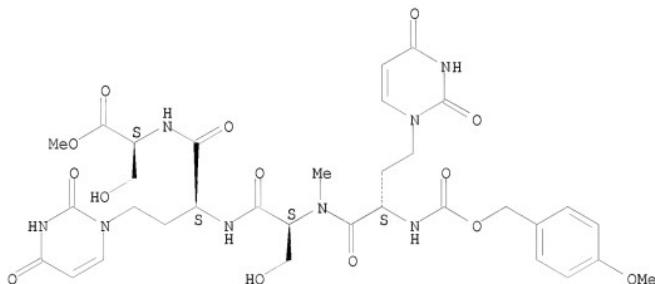
CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



RN 174230-97-8 CAPLUS  
 CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-methoxyphenyl)methoxy]carbonyl-L-2-aminobutanoyl-N-methyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

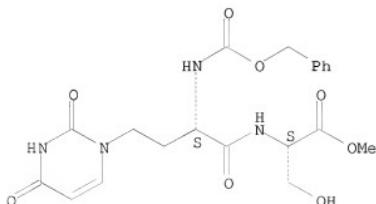
Absolute stereochemistry.



OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L11 ANSWER 79 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1996:85567 CAPLUS  
 DN 124:233126  
 OREF 124:43215a,43218a  
 TI Synthesis of oligopeptides as polynucleotide analogs  
 AU Umemiya, Hiroki; Komatsu, Kazunori; Yamazaki, Takahisa; Kagechika, Hiroyuki; Shudo, Koichi; Hashimoto, Yuichi  
 CS Fac. Pharm. Sci., Univ. Tokyo, Hongo, Bunkyo-ku, Tokyo, 113, Japan  
 SO Nucleic Acids Symposium Series (1995), 34(Twentysecond Symposium on Nucleic Acids Chemistry, 1995), 37-8  
 CODEN: NACSD8; ISSN: 0261-3166  
 PB IRL Press  
 DT Journal  
 LA English  
 AB Several uracil- or adenine-containing dipeptides I ( $n = 1$ ; R = PhCH<sub>2</sub>O<sub>2</sub>C (Z), R<sub>1</sub> = Me, X = Ser; R = 4-MeOCH<sub>2</sub>CH<sub>2</sub>O<sub>2</sub>C (Moz), R<sub>1</sub> = Gly, R<sub>1</sub> = Et, R = Moz, X = D-Ser, R = Me) and II ( $n = 1$ ), which have a nucleic acid base in their side chains were designed as water-soluble nucleotide analogs. Uracil- or adenine-containing amino acids were prepared by cyclocondensation of L-2,4-diaminobutanoic acid derivs. with MeOCH<sub>2</sub>CH<sub>2</sub>CONCO or 4-amino-3,5-dichloropyrimidine and Et orthoformate, resp., and then coupled with serine or glycine esters to afford dipeptides. Oligopeptides I and II ( $n = 2, 4, 6$ ) were prepared from the dipeptide monomer units. Although all the uracil-containing oligopeptides were water-soluble as expected, these exhibited no hypochromic effect with poly(A) or poly(dA). In contrast, adenine-containing oligopeptides exhibited large hypochromicity (ca. 30%) base-specifically with poly(dT) or poly(U).  
 IT 174230-78-5P 174230-79-6P 174230-88-7P  
 174872-45-8P 174872-46-9P 174872-47-0P  
 174872-48-1P 174872-49-2P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and DNA and RNA complexation of water-soluble uracil- and adenine-containing oligopeptides)  
 RN 174230-78-5 CAPLUS  
 CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(phenylmethoxy)carbonyl]-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

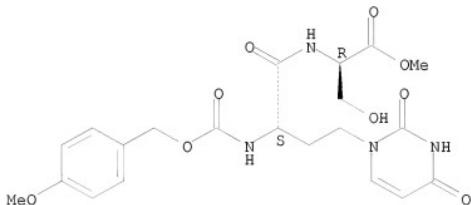
Absolute stereochemistry.



RN 174230-79-6 CAPLUS  
 CN D-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-

methoxyphenyl)methoxy]carbonyl]-L-2-aminobutanoyl-, methyl ester (9CI)  
(CA INDEX NAME)

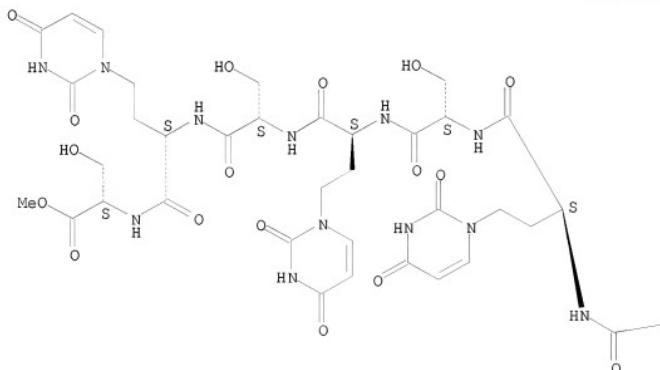
Absolute stereochemistry.

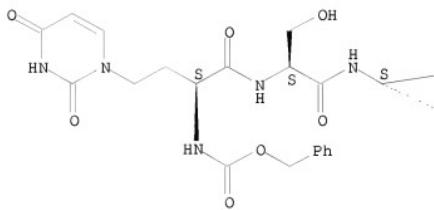
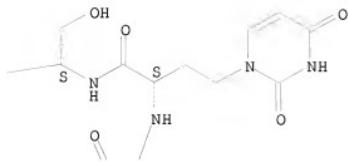


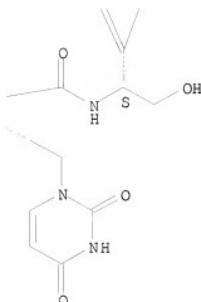
RN 174230-88-7 CAPLUS  
CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(phenylmethoxy)carbonyl]-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



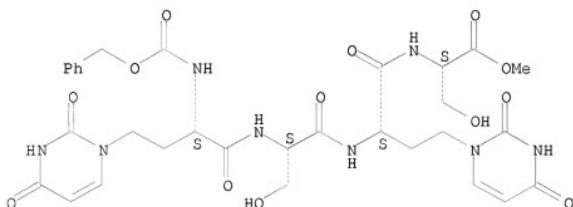




RN 174872-45-8 CAPLUS

CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(phenylmethoxy)carbonyl]-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

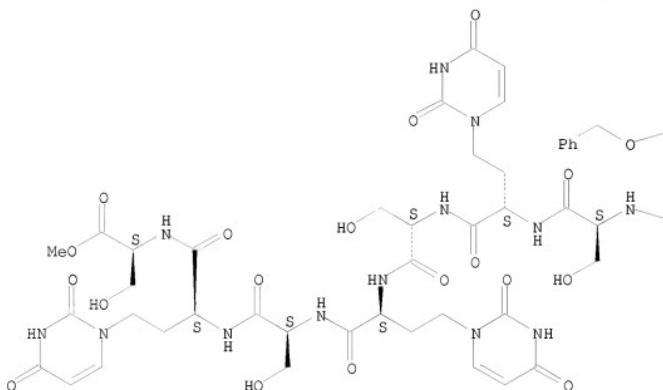


RN 174872-46-9 CAPLUS

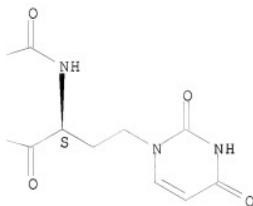
CN L-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(phenylmethoxy)carbonyl]-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

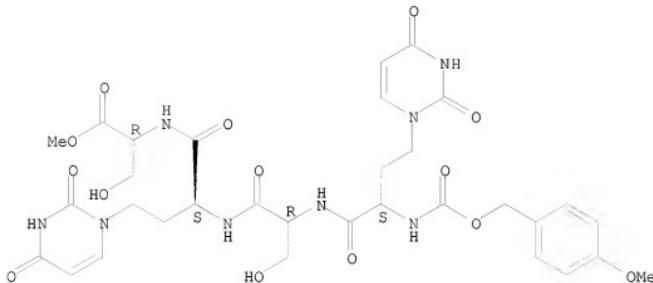


PAGE 1-B



RN 174872-47-0 CAPLUS  
 CN D-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-methoxyphenyl)methoxycarbonyl]-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

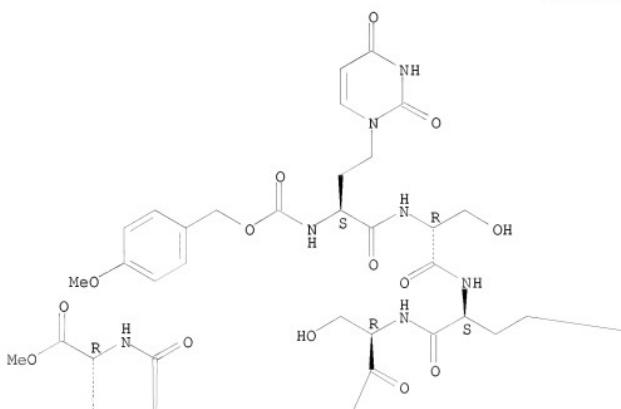


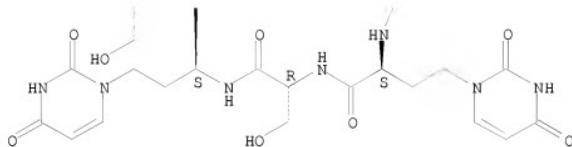
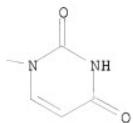
RN 174872-48-1 CAPLUS

CN D-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-methoxyphenyl)methoxy]carbonyl-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



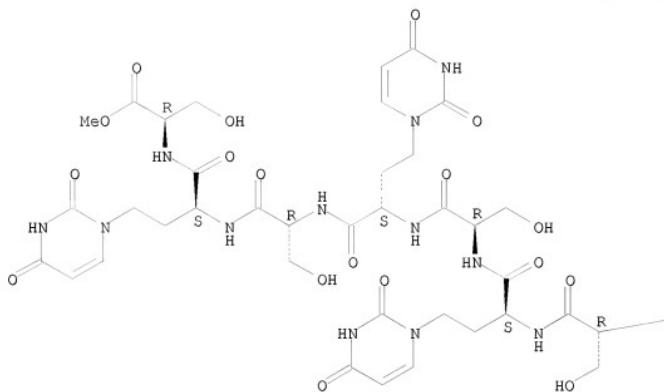


RN 174872-49-2 CAPLUS

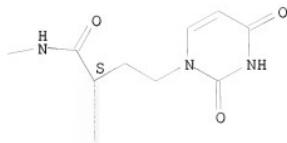
CN D-Serine, 4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-N-[(4-methoxyphenyl)methoxy]carbonyl-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-D-seryl-4-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

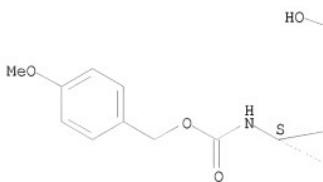
PAGE 1-A



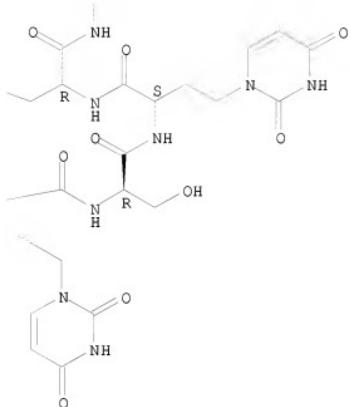
PAGE 1-B



PAGE 2-A



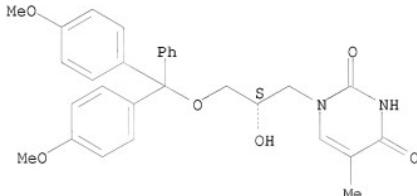
PAGE 2-B



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

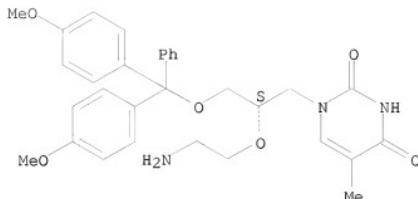
L11 ANSWER 80 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1996:10972 CAPLUS  
 DN 124:261557  
 OREF 124:48475a,48478a  
 TI Synthesis of a carboxamide linked T\*T dimer with an acyclic nucleoside unit and its incorporation in oligodeoxynucleotides  
 AU Larsen, Erik; Danel, Krzysztof; Pedersen, Erik B.  
 CS Dep. of Chemistry, Odense University, Odense, DK-5230, Den.  
 SO Nucleosides & Nucleotides (1995), 14(9 & 10), 1905-12  
 CODEN: NUNUD5; ISSN: 0732-8311  
 PB Dekker  
 DT Journal  
 LA English  
 AB A T\*T dimer with a 2'-OCH<sub>2</sub>CH<sub>2</sub>NHCO-4' linkage connecting two nucleoside units was prepared by condensation of (S)-1-[2-(2-aminoethoxy)-3-(4,4'-dimethoxytrityloxy)propyl]thymine and 1,2-dideoxy-1-thyminyl-β-D-erythro-pentofuranuronic acid. The T\*T dimer was incorporated in oligodeoxynucleotides and investigated for hybridization to DNA.  
 IT 168332-12-5P 168772-58-5P 168772-59-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of a carboxamide linked dinucleotide with an acyclic nucleoside unit and its incorporation in oligodeoxynucleotides)  
 RN 168332-12-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 168772-58-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-(2-aminoethoxy)-3-[bis(4-methoxyphenyl)phenylmethoxy]propyl]-5-methyl-, (S)- (9CI) (CA INDEX NAME)

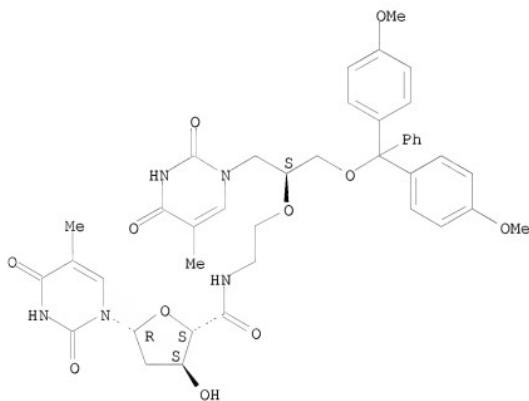
Absolute stereochemistry.



RN 168772-59-6 CAPLUS

CN  $\beta$ -D-erythro-Pentofuranuronamide,  
 N-[2-[2-[bis(4-methoxyphenyl)phenylmethoxy]-1-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]ethoxyethyl]-1,2-dideoxy-1-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

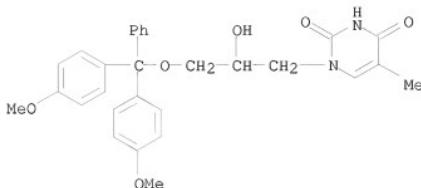


OSC.G 3

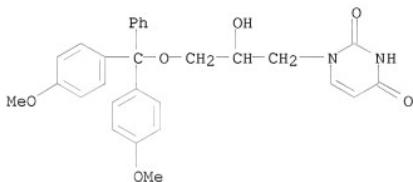
THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L11 ANSWER 81 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:982328 CAPLUS  
 DN 124:30276  
 OREF 124:5823a,5826a  
 TI Synthesis of acyclic oligonucleotides as antiviral and antiinflammatory agents and inhibitors of phospholipase A2  
 IN Cook, Phillip Dan; Acevedo, Oscar L.; Davis, Peter W.; Ecker, David J.;  
 Hebert, Normand  
 PA Isis Pharmaceuticals, Inc., USA  
 SO PCT Int. Appl., 126 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9518820	A1	19950713	WO 1995-US449	19950111
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6448373	B1	20020910	US 1994-179970	19940111
CA 2180867	A1	19950713	CA 1995-2180867	19950111
CA 2180867	C	20041214		
EP 739351	A1	19961030	EP 1995-908491	19950111
EP 739351	B1	20020410		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09508105	T	19970819	JP 1995-518700	19950111
JP 3072127	B2	20000731		
AT 215960	T	20020415	AT 1995-908491	19950111
US 5886177	A	19990323	US 1996-669506	19960808
US 20030065146	A1	20030403	US 2002-162365	20020603
PRAI US 1994-179970	A	19940111		
WO 1995-US449	W	19950111		
OS MARPAT 124:30276				
AB Title ethylene glycol acyclic oligonucleotides I (Q = alkyl, alkenyl, alkynyl, alkylamino, ester amide, thio ester, imine, sulfonyl; X = H, PO3H2, polymer support; Y = H, protected hydroxyl; Z = nucleobase, polyether, polyethylene glycol, N-containing heterocycle; n = 0, Z = nucleobase, alkylamine; m = 1-6) were prepared as antiviral and antiinflammatory agents and inhibitors of phospholipase A2.				
IT 171406-23-8P	171406-29-4P			
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
synthesis of acyclic oligonucleotides as antiviral and antiinflammatory agents and inhibitors of phospholipase A2)				
RN 171406-23-8 CAPLUS				
CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)				



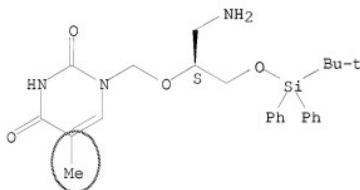
RN 171406-29-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-[(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]- (CA INDEX NAME)



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 82 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:957653 CAPLUS  
 DN 124:146715  
 OREF 124:27305a,27308a  
 TI Syntheses of novel nucleoside dimer analogs containing an acyclic nucleoside and a carbamate linkage  
 AU Obika, Satoshi; Takashima, Yoshihiro; Matsumoto, Yasuhide; Kuromaru, Kiyonori; Imanishi, Takeshi  
 CS Fac. Pharm. Sci., Osaka Univ., Osaka, 565, Japan  
 SO Tetrahedron Letters (1995), 36(47), 8617-20  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier  
 DT Journal  
 LA English  
 AB Novel acyclic nucleoside analogs, e.g. I (T = thymine), were synthesized and successfully incorporated into heterolytic nucleoside dimers, e.g. II, containing natural nucleosides and a carbamate linkage.  
 IT 173465-66-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (syntheses of nucleoside dimer analogs containing an acyclic nucleoside and carbamate linkage)  
 RN 173465-66-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-amino-1-[[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]ethoxy)methyl]-5-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

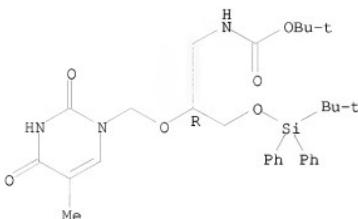


IT	173465-40-2P	173465-43-5P	173465-46-8P
	173465-47-9P	173465-48-0P	173465-49-1P
	173465-60-6P	173465-62-8P	173465-64-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (syntheses of nucleoside dimer analogs containing an acyclic nucleoside and carbamate linkage)

RN 173465-40-2 CAPLUS  
 CN Carbamic acid, [2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxyl]propyl-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

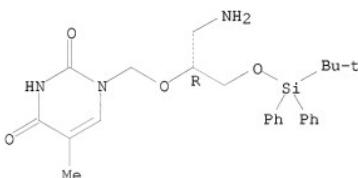
Absolute stereochemistry.



RN 173465-43-5 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-amino-1-[(1,1-dimethylethyl)diphenylsilyl]oxy)methyl]ethoxy]methyl-5-methyl-, (R)- (9CI) (CA INDEX NAME)

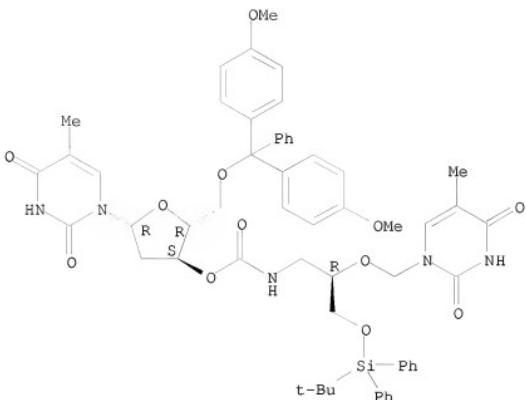
Absolute stereochemistry.



RN 173465-46-8 CAPLUS

CN Thymidine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-, 3'-[(2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]carbamate, (R)- (9CI) (CA INDEX NAME)

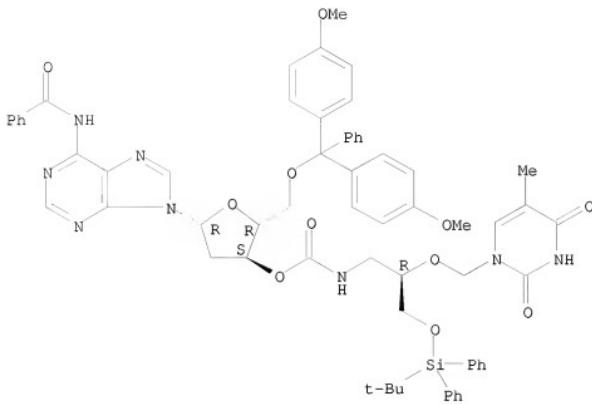
Absolute stereochemistry.



RN 173465-47-9 CAPLUS

CN Adenosine, N-benzoyl-5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-, 3'-(2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy)propyl]carbamate], (R)- (9CI) (CA INDEX NAME)

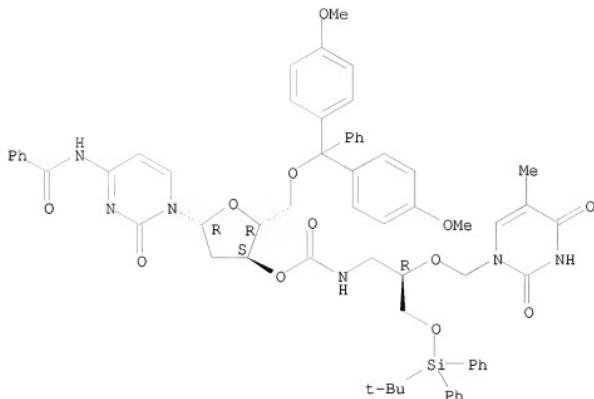
Absolute stereochemistry.



RN 173465-48-0 CAPLUS

CN Cytidine, N-benzoyl-5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-,  
3'-(2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-  
[[[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]carbamate], (R)- (9CI) (CA  
INDEX NAME)

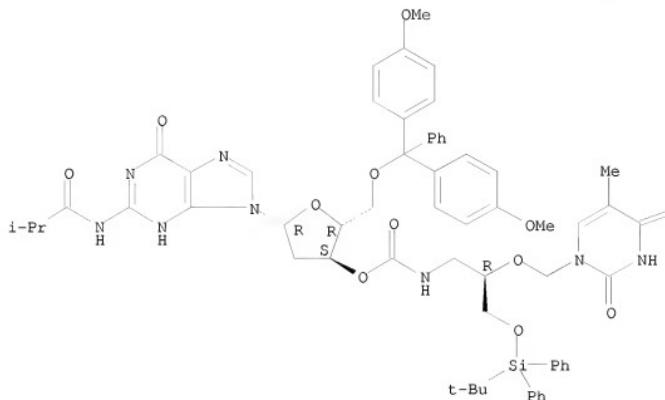
Absolute stereochemistry.



RN 173465-49-1 CAPLUS  
 CN Guanosine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-N-(2-methyl-1-oxopropyl)-, 3'-[[2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]carbamate], (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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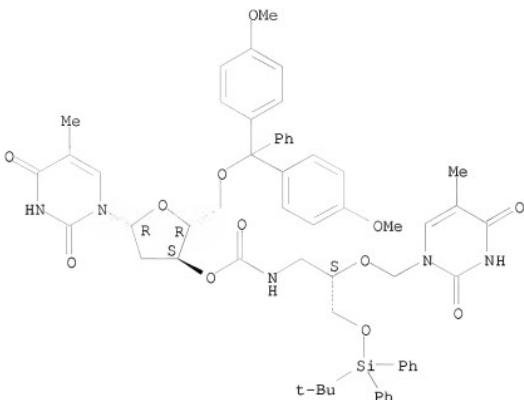


PAGE 1-B

 $\equiv O$ 

RN 173465-60-6 CAPLUS  
 CN Thymidine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-,  
 3'-[2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-  
 [(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]carbamate], (S)- (9CI) (CA  
 INDEX NAME)

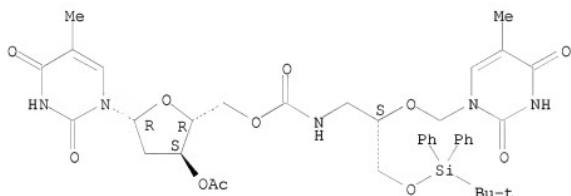
Absolute stereochemistry.



RN 173465-62-8 CAPLUS

CN Thymidine, 3'-acetate 5'-[[(2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(1,1-dimethylethyl)diphenylsilyl]oxy]propyl]carbamate], (S)- (9CI) (CA INDEX NAME)

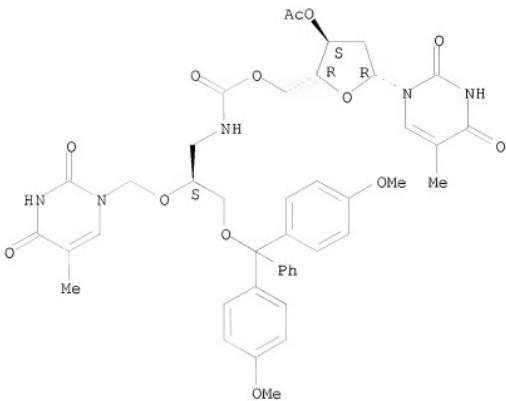
Absolute stereochemistry.



RN 173465-64-0 CAPLUS

CN Thymidine, 3'-acetate 5'-[[(3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl]carbamate], (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



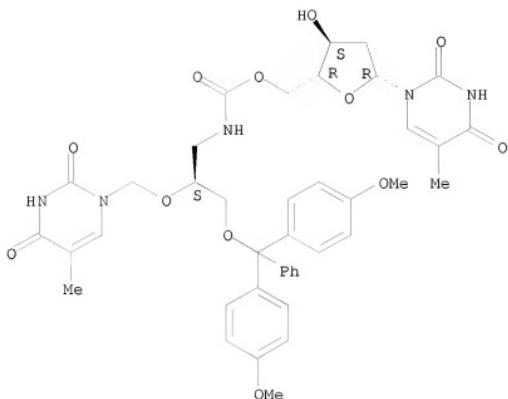
IT 173465-65-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(syntheses of nucleoside dimer analogs containing an acyclic nucleoside and carbamate linkage)

RN 173465-65-1 CAPLUS

CN Thymidine, 5'-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl]carbamate, (S)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

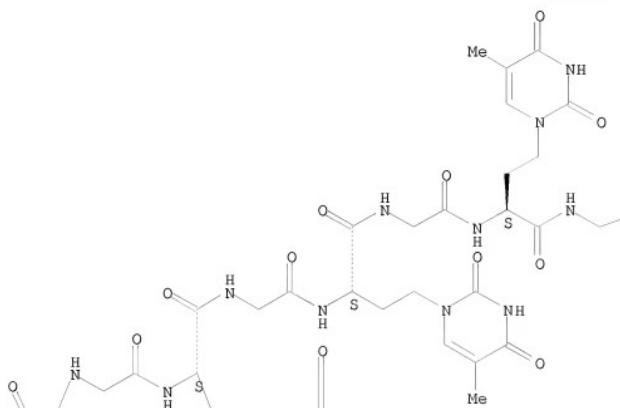
L11 ANSWER 83 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:820573 CAPLUS  
 DN 123:257406  
 OREF 123:46059a,46062a  
 TI Preparation of nucleic acid-binding oligomers with amino acid-containing backbones and nucleobase-containing side chains for therapy and diagnosis.  
 IN Loebberding, Antonius; Mielke, Burkhard; Schwemler, Chrostoph; Schwenner, Eckhardt; Stropp, Udo; Springer, Wolfgang; Kretschmer, Axel; Poetter, Thorsten  
 PA Bayer A.-G., Germany  
 SO Ger. Offen., 46 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 4331011	A1	19950316	DE 1993-4331011	19930913
EP 646596	A1	19950405	EP 1994-113573	19940831
EP 646596	B1	19990526		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, SE				
AT 180494	T	19990615	AT 1994-113573	19940831
ES 2131612	T3	19990801	ES 1994-113573	19940831
AU 9471619	A	19950323	AU 1994-71619	19940901
JP 07112969	A	19950502	JP 1994-238619	19940907
CA 2131760	A1	19950314	CA 1994-2131760	19940909
US 5849893	A	19981215	US 1996-719048	19960924
PRAI DE 1993-4331011	A	19930913		
US 1994-300910	A3	19940906		
OS MARPAT 123:257406				
AB Title compds. [I; A = CO, CHR, CRR'; R, R' = H, Oh, alkyl, aralkyl, aryl; B = H, OH, alkanoyl, DNA intercalator, aryl, heterocycl, (modified) naturally occurring nucleobase; C = CH, CR; D = NH, CH2, CHR, CRR'; E = NR, CHR, CRR', O, S; A can be bonded to E via (CH2)n; n = 0-2; F = CH2, CO, SO2, SO, CS; Q = (CR1R2)m; m = 0-2; R1, R2 = (un)natural amino acid residue; G can be bonded to Q by (CH2); G = NH, NR, O, S; M = CH2, CO, SO2, SO, CS; L = (CH2)p, CHR, CRR'; p = 0-2; K, N = H, carrier system, reporter ligand, solubility enhancing group; s = 1-30], were prepared for control of gene expression (no data). Thus, H-(Q1)3-Gly-OH was prepared by solid phase synthesis using BOC-protected reactants (preparation given) on phenylacetamidomethyl resin. Title compds. are said to have antiviral activity.				
IT 168264-38-8P	168264-39-9P	168264-44-6P		
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)				
(preparation of nucleic acid-binding oligomers with amino acid-containing backbones and nucleobase-containing side chains for therapy and diagnosis)				
RN 168264-38-8 CAPLUS				
CN L-Alanine, 4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoyl-L-alanyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoylglycyl-4-(3,4-dihydro-5-				

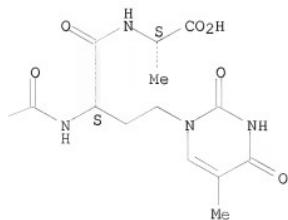
methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

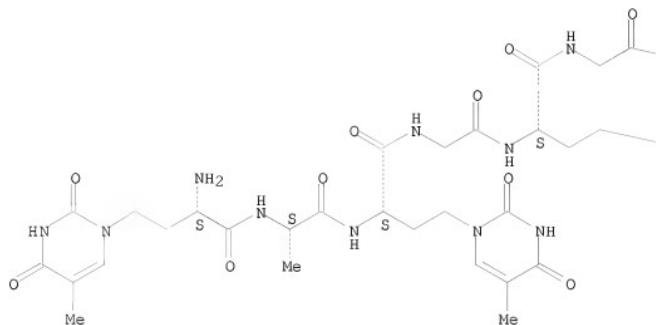
PAGE 1-B



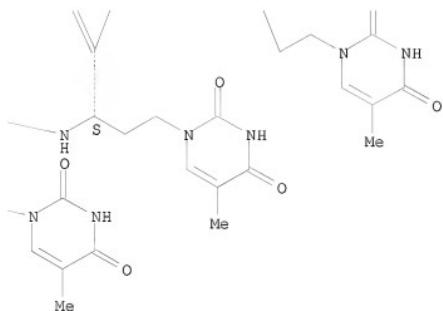
PAGE 1-C



PAGE 2-A



PAGE 2-B

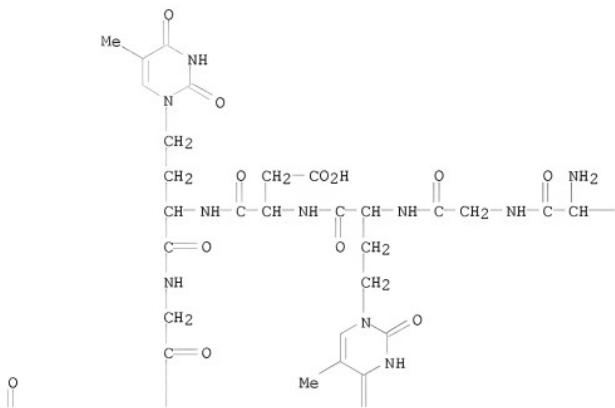


RN 168264-39-9 CAPLUS

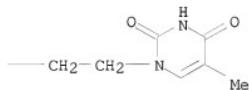
CN L-Aspartic acid, 4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoyl-L- $\alpha$ -aspartyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoyl-L- $\alpha$ -aspartyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoyl-L- $\alpha$ -aspartyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoyl-L- $\alpha$ -aspartyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-amino butanoyl-L- $\alpha$ -aspartyl-

aminobutanoylglycyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-  
2-aminobutanoyl- (9CI) (CA INDEX NAME)

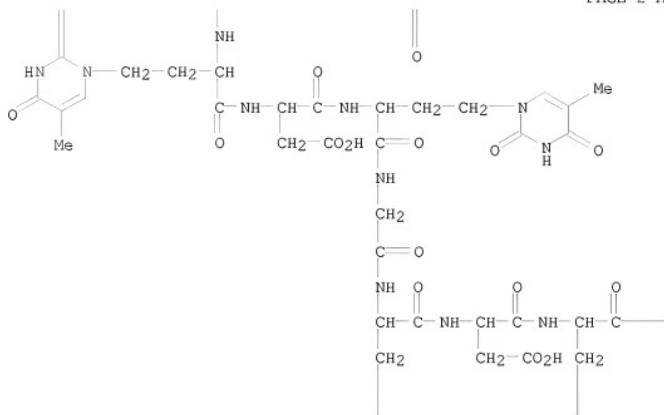
PAGE 1-A



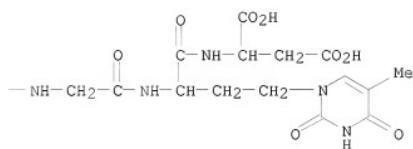
PAGE 1-B



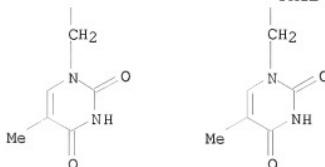
PAGE 2-A



PAGE 2-B



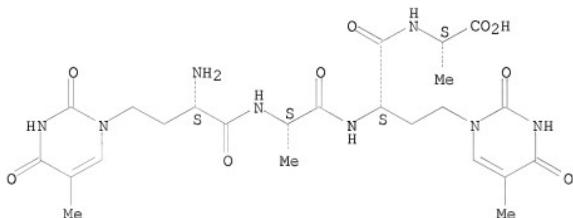
PAGE 3-A



RN 168264-44-6 CAPLUS

CN L-Alanine, 4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl-L-alanyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-aminobutanoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



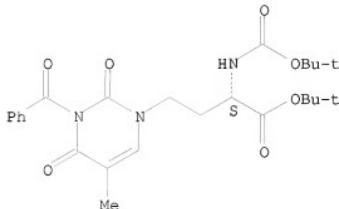
IT 168264-02-6P 168264-03-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of nucleic acid-binding oligomers with amino acid-containing backbones and nucleobase-containing side chains for therapy and diagnosis)

RN 168264-02-6 CAPLUS

CN 1(2H)-Pyrimidinebutanoic acid, 3-benzoyl-a-[(1,1-dimethylethoxy)carbonyl]amino]-3,4-dihydro-5-methyl-2,4-dioxo-, 1,1-dimethylethyl ester, (aS)- (CA INDEX NAME)

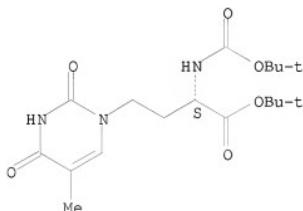
Absolute stereochemistry.



RN 168264-03-7 CAPLUS

CN 1(2H)-Pyrimidinebutanoic acid,  $\alpha$ -[(1,1-dimethylethoxy)carbonylamino]-3,4-dihydro-5-methyl-2,4-dioxo-1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

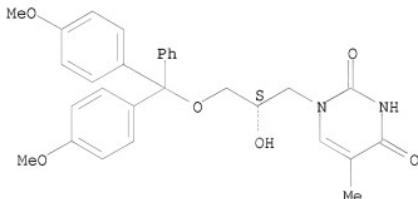
Absolute stereochemistry.



OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

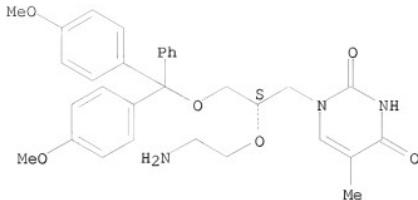
L11 ANSWER 84 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:631154 CAPLUS  
 DN 123:25726  
 OREF 123:46023a,46026a  
 TI Evaluation of oligonucleotides with novel modifications  
 AU Larsen, Erik; Danel, Krzysztof; Abdel-Aleem, Abdel-Aleem H.; Nielsen,  
 Pouls; Wengel, Jesper; Pedersen, Erik B.  
 CS Dep. of Chemistry, Odense Univ., Odense, DK-5230, Den.  
 SO Nucleosides & Nucleotides (1995), 14(3-5), 1097-100  
 CODEN: NUNUD5; ISSN: 0732-8311  
 PB Dekker  
 DT Journal  
 LA English  
 AB Oligodeoxynucleotides modified with carboxamide linked dimeric nucleotide  
 and an acyclic nucleoside were prepared and investigated for their  
 hybridization properties toward DNA.  
 IT 168332-12-5P 168772-58-5P 168772-59-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of carboxamide linked oligodeoxyribonucleotides and  
 hybridization toward DNA)  
 RN 168332-12-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-  
 2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 168772-58-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-(2-aminoethoxy)-3-[bis(4-  
 methoxyphenyl)phenylmethoxy]propyl]-5-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

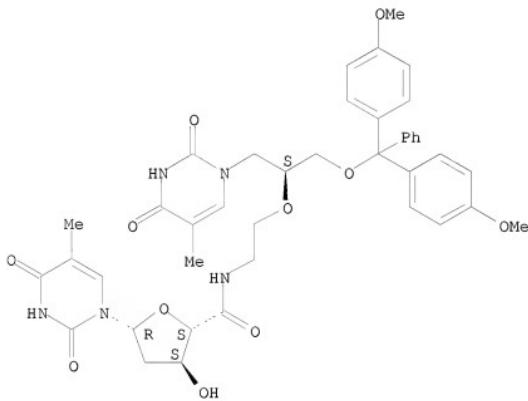


RN 168772-59-6 CAPLUS

CN  $\beta$ -D-erythro-Pentofuranuronamide,

N-[2-[2-[bis(4-methoxyphenyl)phenylmethoxy]-1-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]ethoxy]ethyl]-2-dideoxy-1-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-, (S)- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

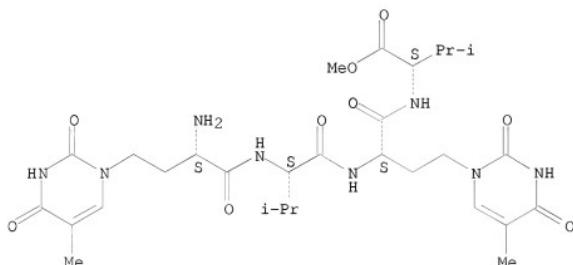


OSC.G 5

THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L11 ANSWER 85 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:631089 CAPLUS  
 DN 123:286627  
 OREF 123:51386n,51387a  
 TI Peptide analogs of DNA consisting of L- $\alpha$ -amino- $\gamma$ -thymine  
     butyric acid and L-valine subunits  
 AU Ceulemans, G.; Khan, K.; Van Schepdael, A.; Herdewijn, P.  
 CS Rega Inst. for Medical Res., Katholieke Univ. Leuven, Louvain, B-3000,  
     Belg.  
 SO Nucleosides & Nucleotides (1995), 14(3-5), 813-16  
 CODEN: NUNUD5; ISSN: 0732-8311  
 PB Dekker  
 DT Journal  
 LA English  
 AB Reaction of N-Boc-L-homoserine benzylester with N3-benzoylthymine under  
     Mitsunobu conditions afforded N-Boc-L- $\alpha$ -amino- $\gamma$ -N3-  
     benzoylthymine butyric acid benzyl ester. After removal of the N-benzoyl  
     and O-benzyl protecting group, this compound was used in solution phase peptide  
     synthesis.  
 IT 169515-42-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
     (peptide analogs of DNA consisting of aminothyminebutyric acid and  
     valine subunits)  
 RN 169515-42-8 CAPLUS  
 CN L-Valine, 4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-L-2-  
     aminobutanoyl-L-valyl-4-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-  
     L-2-aminobutanoyl-, methyl ester (9CI) (CA INDEX NAME)

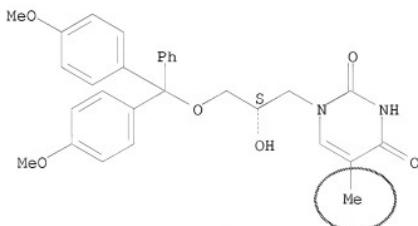
Absolute stereochemistry.



OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

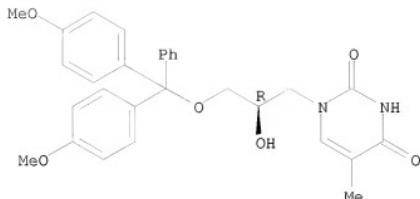
L11 ANSWER 86 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:476641 CAPLUS  
 DN 123:257237  
 OREF 123:46023a,46026a  
 TI Synthesis and evaluation of oligodeoxynucleotides containing acyclic nucleosides: introduction of three novel analogs and a summary  
 AU Nielsen, Poul; Dreieoe, Lars H.; Wengel, Jesper  
 CS Dep. Chem., Odense Univ., Odense, DK-5230, Den.  
 SO Bioorganic & Medicinal Chemistry (1995), 3(1), 19-28  
 CODEN: BMECEP; ISSN: 0968-0896  
 PB Elsevier  
 DT Journal  
 LA English  
 AB Novel flexible oligodeoxynucleotides containing (S)-1-(2,3-dihydroxypropyl)thymine or 2',3'-seco-thymidine nucleoside analogs were synthesized on an automated DNA-synthesizer. Oligodeoxynucleotides with one, two or three acyclic nucleosides incorporated in the middle or in the ends of 17-mers have been evaluated. 3'-End-modified oligomers were significantly stabilized towards 3'-exonuclease degradation compared to unmodified analogs and showed acceptable hybridization properties as measured by UV expts. For oligodeoxynucleotide analogs containing the three novel acyclic monomers in the middle, a more pronounced reduction in duplex stability was observed. All oligodeoxynucleotides containing acyclic nucleoside analogs made so far are evaluated with respect to stability towards 3'-exonuclease degradation and hybridization properties.  
 IT 168332-12-5P 168332-14-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and exonuclease stability of oligodeoxyribonucleotides containing acyclic nucleosides)  
 RN 168332-12-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 168332-14-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2R)-3-[bis(4-methoxyphenyl)phenylmethoxy]-2-hydroxypropyl]-5-methyl- (CA INDEX NAME)

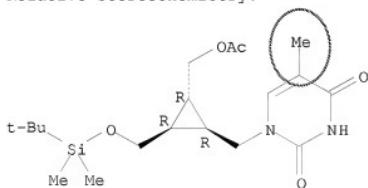
Absolute stereochemistry. Rotation (+).



OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

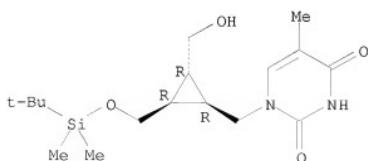
L11 ANSWER 87 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:270807 CAPLUS  
 DN 123:199277  
 OREF 123:35601a,35604a  
 TI Synthesis of potentially antiviral cyclopropyl nucleosides  
 AU Cluet, F.; Haudrechy, A.; Le Ber, P.; Sinay, P.; Wick, A.  
 CS Synthelabo Recherche, Z.I. Limay-Porcheville, Gargenville, 78440, Fr.  
 SO Synlett (1994), (11), 913-15  
 CODEN: SYNLES; ISSN: 0936-5214  
 PB Thieme  
 DT Journal  
 LA English  
 AB Novel rigid cyclopropyl nucleosides I (R = N3, R1 = OH; R = OH, R1 = N3) have been prepared. The thymine heterocycle was created through a novel mild mercuri-intramol cyclocondensation reaction or coupled with a selectively trisubstituted cyclopropane ring.  
 IT 167627-79-4P 167627-82-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of potentially antiviral cyclopropyl nucleosides)  
 RN 167627-79-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-[(acetoxy)methyl]-3-[[[(1,1-dimethyl ethyl)dimethylsilyl]oxy]methyl]cyclopropyl)methyl]-5-methyl-, (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 167627-82-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-[[[(1,1-dimethyl ethyl)dimethylsilyl]oxy]methyl]-3-(hydroxymethyl)cyclopropyl)methyl]-5-methyl-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ )- (9CI) (CA INDEX NAME)

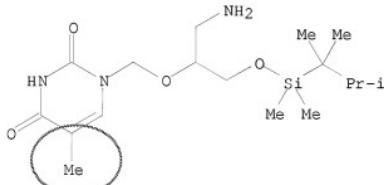
Relative stereochemistry.



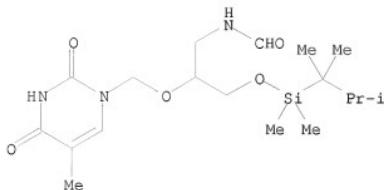
10/585,283

OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

L11 ANSWER 88 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:92509 CAPLUS  
 DN 122:240299  
 OREF 122:43933a,43936a  
 TI Synthesis and antiviral study of acyclic analogs of 3'-azido, 3'-amino, and 3'-fluoro-3'-deoxythymidine, and of HEPT analogs  
 AU Trinh, Minh-Chau; Florent, Jean-Claude; Grierson, David S.; Monneret, Claude  
 CS Sect. Biol., Inst. Curie, Paris, F-75231, Fr.  
 SO Synthesis (1994), (9), 939-43  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DT Journal  
 LA English  
 AB Several new acyclic nucleoside HEPT analogs I ( $R = F, N_3, OH$ ) have been synthesized from racemic epi-chlorohydrin. This involves epoxide opening followed by chain elongation with iodomethyl Ph sulfide and subsequent coupling of the phenylthioacetal with thymine. None of these nucleosides showed any significant inhibitory activity against HIV.  
 IT 162314-55-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and antiviral study of acyclic analogs of azido amino and fluorodeoxythymidine and of HEPT analogs)  
 RN 162314-55-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-amino-1-[[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]methyl]ethoxy]methyl]-5-methyl- (CA INDEX NAME)



IT 162314-57-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and antiviral study of acyclic analogs of azido amino and fluorodeoxythymidine and of HEPT analogs)  
 RN 162314-57-0 CAPLUS  
 CN Formamide, N-[2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]propyl- (CA INDEX NAME)

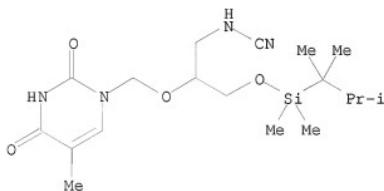


IT 162314-56-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis and antiviral study of acyclic analogs of azido amino and fluorodeoxythymidine and of HEPT analogs)

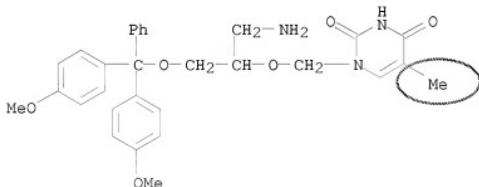
RN 162314-56-9 CAPLUS

CN Cyanamide, [2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(dimethyl(1,1,2-trimethylpropyl)silyloxy)propyl]- (9CI) (CA INDEX NAME)



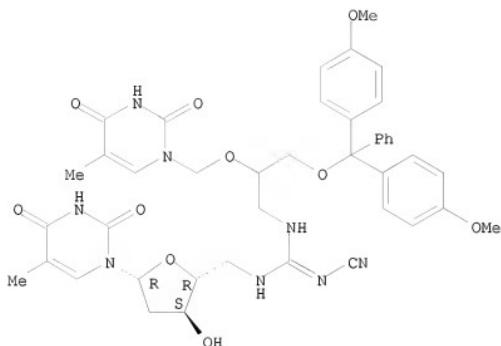
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L11 ANSWER 89 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1995:15565 CAPLUS  
 DN 122:187987  
 OREF 122:34451a,34454a  
 TI Mixed oligonucleotide analogs with an acyclic carbohydrate moiety and N-cyanoguanidine functionality  
 AU Pannecouque, C.; Schepers, G.; Rozenski, J.; Van Aerschot, A.; Claes, P.; Herdewijn, P.  
 CS Lab. Med. Chem., Kathol. Univ. Leuven, Louvain, B-3000, Belg.  
 SO Bioorganic & Medicinal Chemistry Letters (1994), 4(10), 1203-6  
 CODEN: BMCL8; ISSN: 0960-894X  
 DT Journal  
 LA English  
 AB Mixed oligonucleotide analogs having a backbone structure with a N-cyanoguanidine functionality and an acyclic sugar moiety were synthesized. This combination, however, has a detrimental effect on duplex stability of DNA-DNA hybrids.  
 IT 160998-65-2P 160998-69-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, in preparation of cyanoguanidine linked acyclic oligodeoxyribonucleotide duplexes)  
 RN 160998-65-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-amino-1-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]ethoxy]methyl]-5-methyl- (CA INDEX NAME)



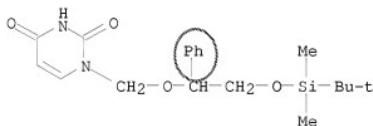
RN 160998-69-6 CAPLUS  
 CN Thymidine, 5'-[[[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl]amino](cyanoamino)methylene]amino]-5'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry unknown.

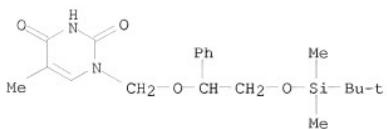


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 90 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1994:457858 CAPLUS  
 DN 121:57858  
 OREF 121:10449a,10452a  
 TI Synthesis and anti-HIV-1 activities of 6-arylthio and  
 6-arylselenoacyclonucleosides  
 AU Pan, Bai Chuan; Chen, Zhi Hao; Piras, Giovanna; Dutschman, Ginger E.;  
 Rowe, Elizabeth C.; Cheng, Yung Chi; Chu, Shih Hsi  
 CS Div. Biol. Med., Brown Univ., Providence, RI, 02912, USA  
 SO Journal of Heterocyclic Chemistry (1994), 31(1), 177-85  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DT Journal  
 LA English  
 AB 6-Arylthio and 6-arylselenoacyclonucleosides were synthesized and tested  
 for the ability to inhibit replication of HIV-1. Lithiation of  
 acyclonucleosides with LDA followed by reaction with the electrophiles Ph  
 disulfide, di-Ph diselenide, 2,2'-dipyridyl disulfide or 2,2'-dipyridyl  
 diselenide afforded acyclonucleosides I [R = H, Me, Et; R1 = SePh,  
 2-pyridylthio, 2-pyridylseleno; R2 = CH2Ph, cyclohexylmethyl, CHPhOH]. I  
 [R2 = CHPhOH] were obtained by deprotection of I [R2 = CHPhOSiMe2CMe3].  
 Dehydrated products II [R2 = CPh:CH2] were also formed during the  
 reactions. I [R = Et, R1 = 2-pyridylthio, 2-pyridylseleno, R2 = CH2Ph]  
 were more active against HIV-1 in both MT-2 and CEM-IW cell lines than  
 AZT, DDC, DDI or D4T. The EC50 of I [R = Et, R1 = 2-pyridylthio, R2 =  
 CH2Ph] against HIV-1 in CEM-IV cell was in the nanomolar range with a  
 therapeutic index of 1100.  
 IT 155831-61-1P 155831-62-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction of, in preparation of arylthio- and  
 arylselenoacyclonucleosides)  
 RN 155831-61-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]-  
 1-phenylethoxy]methyl]- (CA INDEX NAME)



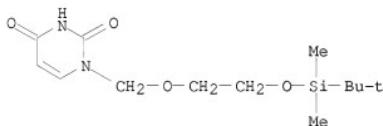
RN 155831-62-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]-  
 1-phenylethoxy]methyl]- (CA INDEX NAME)



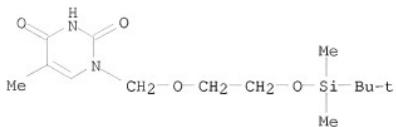
OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

L11 ANSWER 91 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1993:517755 CAPLUS  
 DN 119:117755  
 OREF 119:21211a,21214a  
 TI Acyclic 6-phenylselenenylpyrimidine nucleosides as antiviral agents  
 IN Schinazi, Raymond F.  
 PA Baker Cummins Pharmaceuticals, Inc., USA  
 SO PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9302044	A1	19930204	WO 1992-US3824	19920508
W: AU, CA, FI, JP, KR, NO RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE AU 9219944	A	19930223	AU 1992-19944	19920508
PRAI US 1991-733346	A	19910722		
WO 1992-US3824	A	19920508		
OS MARPAT 119:117755				
AB The present invention consists of title compds. I (R1 = H, halo, vinyl, halovinyl, C1-3 alkyl, haloalkyl, hydroxyalkyl; R2 = HO, H; X1 = NH, O; X2, X3 = O, S), which are useful as antiviral agents. Thus, 1-(ethoxymethyl)-6-(phenylselenenyl)thymine(I, R1 = Me, R2 = H, X1-X3 = O), prepared by sequential condensation of EtOCH <sub>2</sub> Cl with bis(trimethylsilyl)thymine, silylation with Me <sub>3</sub> CMe <sub>2</sub> SiCl, selenylation with (Me <sub>2</sub> CH) <sub>2</sub> NLi-PhSeSePh, and then desilylation, showed an EC <sub>50</sub> of 1.2 $\mu$ M against HIV-1 in human peripheral blood mononuclear cells.				
IT 121749-94-8P 121749-98-2P				
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				(preparation and selenylation of, in synthesis of antiviral nucleoside)
RN 121749-94-8 CAPLUS				
CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethoxy]methyl- (CA INDEX NAME)				



RN 121749-98-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethoxy]methyl- (CA INDEX NAME)



OSC.G 2        THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
RE.CNT 1        THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 92 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1993:444720 CAPLUS  
 DN 119:44720  
 OREF 119:8046h,8047a  
 TI Production and use of magnetic porous inorganic materials  
 IN Wong, Yuan N.  
 PA CPG, Inc., USA  
 SO PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9310162	A1	19930527	WO 1992-US10113	19921117

W: AU, CA, JP, US  
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE  
 US 5610274 A 19970311 US 1992-952264 19920928  
 AU 9331465 A 19930615 AU 1993-31465 19921117

PRAI US 1991-794910 A1 19911120  
 WO 1992-US10113 A 19921117

AB Magnetic porous siliceous materials of approx. particle size 1-200  $\mu$ m are disclosed which are useful for solid supports in chromatog., immunoassays, synthesis, and other separation and purification procedures.

Thus, a controlled-pore glass (CPG) slurry was treated with a com. colloidal iron oxide to produce magnetic CPG particles, which were characterized. These articles were amino-functionalized by treatment with  $\gamma$ -aminopropyltrimethoxysilane, and the product particles were used to immobilize antibody to hepatitis B surface antigen; the antibody-coated particles were used in an RIA. Preparation of a magnetic nucleoside CPG and of a magnetic protein A CPG is also described.

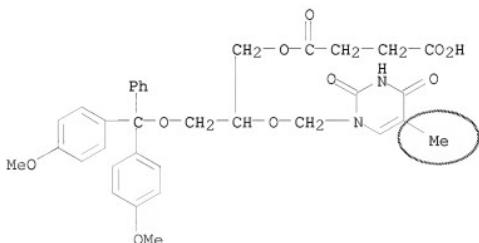
IT 120188-25-2

RL: ANST (Analytical study)

(immobilization of, magnetic controlled-pore glass particles for)

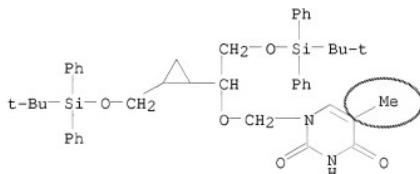
RN 120188-25-2 CAPLUS

CN Butanedioic acid, 1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl ester (CA INDEX NAME)



OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)  
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

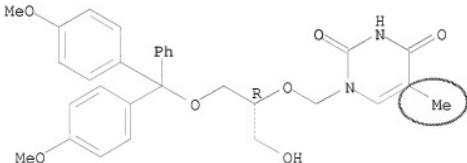
L11 ANSWER 93 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1993:102380 CAPLUS  
 DN 118:102380  
 OREF 118:17953a,17956a  
 TI 1',2'-seco-2',3'-Dideoxynucleoside analogs: synthesis and antiviral evaluation of racemic trans-1'(1',5'-dihydroxy 3',4'-methylene)pent-2'-oxy)methyl]nucleosides  
 AU Azymah, Muhammad; Chavis, Claude; Fruchier, Alain; Lucas, Marc; Imbach, Jean Louis  
 CS Lab. Chim. Bio-Org., Univ. Montpellier II, Sci. Tech. Languedoc, Montpellier, 34095, Fr.  
 SO Nucleosides & Nucleotides (1992), 11(9), 1607-20  
 CODEN: NUNUD5; ISSN: 0732-8311  
 DT Journal  
 LA English  
 OS CASREACT 118:102380  
 AB Reaction of (+)-but-3-en-1,2-diol with N<sub>2</sub>CHCO<sub>2</sub>Et afforded two cyclopropyl compds. I. Their relative trans stereochem. at C-2 and C-3 has been determined by high-field and computational NMR spectroscopy. Title racemic nucleosides II (B = adenine, cytosine, guanine, thymine) have been obtained through a regiospecific alkylation procedure and their antiviral evaluation is reported.  
 IT 146061-97-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and desilylation of)  
 RN 146061-97-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]-1-2-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]cyclopropyl]ethoxy]methyl]-5-methyl- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

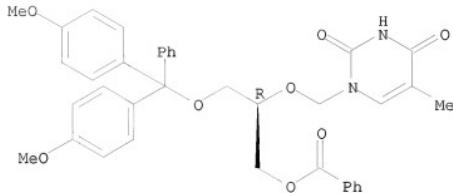
L11 ANSWER 94 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1992:551267 CAPLUS  
 DN 117:151267  
 OREF 117:26221a,26224a  
 TI Isotactic glycerol oligothymidylate. A convenient preparation of (R)- and (S)-1',2'-seco-2'-nor-thymidine  
 AU Azymah, Muhammad; Chavis, Claude; Lucas, Marc; Morvan, Francois; Imbach, Jean Louis  
 CS Lab. Chim. Bio-Org., Univ. Montpellier II, Sci. Tech. Languedoc, Montpellier, 34095, Fr.  
 SO Nucleosides & Nucleotides (1992), 11(6), 1241-55  
 CODEN: NUNUD5; ISSN: 0732-8311  
 DT Journal  
 LA English  
 OS CASREACT 117:151267  
 AB (R)- And (S)-dimethoxytrityl derivs. of 1',2'-seco-2'-nor-thymidine were synthesized in an efficient way. Isotactic dodecaoligoglycerothymidylate was obtained by a solid support phosphoramidite approach. The lack of hybridization with poly rA makes this acyclic oligonucleotide useless as antisense or sense agent.  
 IT 143381-08-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and benzylation of)  
 RN 143381-08-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[bis(4-methoxyphenyl)phenylmethoxy]-1-(hydroxymethyl)ethoxy]methyl]-5-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



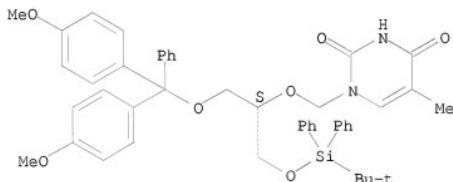
IT 143381-05-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and debenzylation of)  
 RN 143381-05-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-(benzoyloxy)-1-[(bis(4-methoxyphenyl)phenylmethoxy]methyl]ethoxy]methyl]-5-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



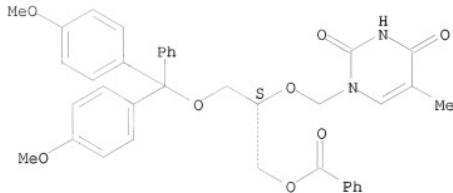
IT 143381-07-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and desilylation of)  
 RN 143381-07-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[bis(4-methoxyphenyl)phenylmethoxy]-1-  
 [[[1,1-dimethylethyl]diphenylsilyloxy]methyl]ethoxy]methyl]-5-methyl-,  
 (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



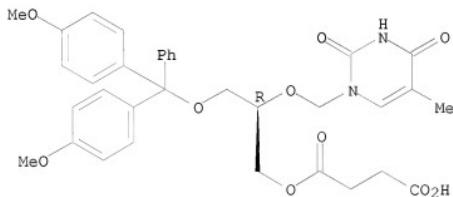
IT 143381-09-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and detritylation of)  
 RN 143381-09-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-(benzoyloxy)-1-[[bis(4-  
 methoxyphenyl)phenylmethoxy]methyl]ethoxy]methyl]-5-methyl-, (S)- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



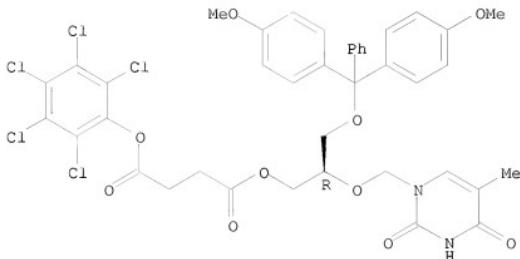
IT 143381-12-8DP, polymer support 143381-14-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (Preparation and reaction of, in synthesis of oligodeoxyribonucleotide)  
 RN 143381-12-8 CAPLUS  
 CN Butanedioic acid, mono[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxylpropyl] ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 143381-14-0 CAPLUS  
 CN Butanedioic acid, 3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxylpropyl pentachlorophenyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



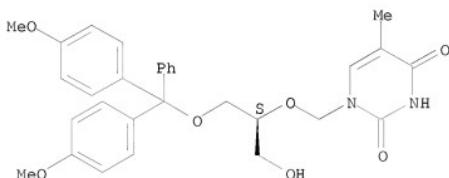
IT 124318-82-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, in synthesis of oligonucleotide)

RN 124318-82-7 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1S)-2-[bis(4-methoxyphenyl)phenylmethoxy]-  
1-(hydroxymethyl)ethoxy]methyl- 5-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 143381-13-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, with pentachlorophenyl)

RN 143381-13-9 CAPLUS

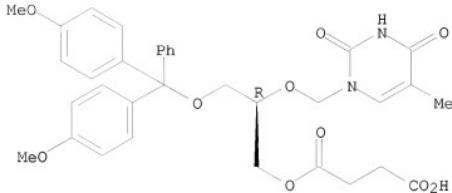
CN Butanedioic acid, mono[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl] ester, (R)-,  
compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 143381-12-8

CMF C34 H36 N2 O10

Absolute stereochemistry.

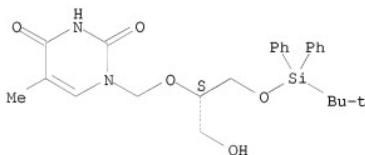


CM 2

CRN 121-44-8  
CMF C6 H15 N

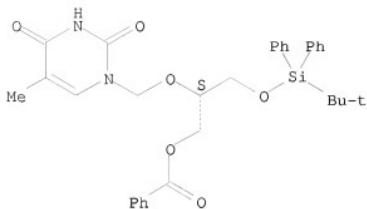
IT 143381-06-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and tritylation of)  
 RN 143381-06-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)diphenylsilyloxy]-1-(hydroxymethyl)ethoxy]methyl]-5-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 143381-03-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation, debenzylation, and desilylation of)  
 RN 143381-03-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-(benzoyloxy)-1-[[[(1,1-dimethylethyl)diphenylsilyloxy]methyl]ethoxy]methyl]-5-methyl-, (S)- (9CI) (CA INDEX NAME)

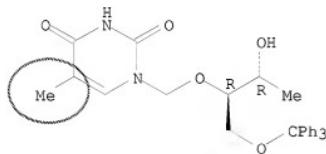
Absolute stereochemistry.



OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

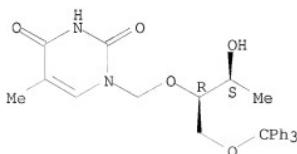
L11 ANSWER 95 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1992:490674 CAPLUS  
 DN 117:90674  
 OREF 117:15849a,15852a  
 TI Synthesis of 1',2'-seco-nucleoside analogs of AZT  
 AU Vemishetti, Purushotham; El Subbagh, Hussein I.; Abushanab, Elie; Panzica, Raymond P.  
 CS Dep. Med. Chem., Univ. Rhode Island, Kingston, RI, 02881, USA  
 SO Nucleosides & Nucleotides (1992), 11(2-4), 739-48  
 CODEN: NUNUD5; ISSN: 0732-8311  
 DT Journal  
 LA English  
 OS CASREACT 117:90674  
 AB Seco-nucleosides I were prepared and evaluated as antiviral agents. The chiral, acyclic side chains of these thymine acyclonucleosides were derived from D-isoascorbic acid. I were screened against HIV, other RNA viruses, and two DNA viruses and they were found to be inactive.  
 IT 142681-62-7P 142681-66-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and azidolysis of)  
 RN 142681-62-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-hydroxy-1-[(triphenylmethoxy)methyl]propoxy)methyl]-5-methyl-, [R-(R\*,R\*)]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



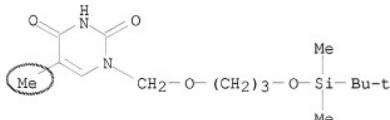
RN 142681-66-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-hydroxy-1-[(triphenylmethoxy)methyl]propoxy)methyl]-5-methyl-, [R-(R\*,S\*)]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

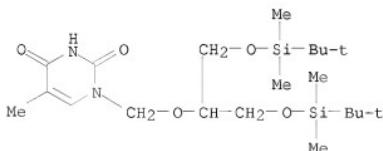




L11 ANSWER 96 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1992:490666 CAPLUS  
 DN 117:90666  
 OREF 117:15845a,15848a  
 TI Synthesis of some analogs of 1-[(2-hydroxyethoxy)methyl]-6-(phenylthio)thymine (HEPT) which have different types of acyclic structures  
 AU Tanaka, Hiromichi; Miyasaka, Tadashi; Sekiya, Kouichi; Takashima, Hideaki; Ubasawa, Masaru; Nitta, Issei; Baba, Masanori; Walker, R. T.; De Clercq, E.  
 CS Sch. Pharm. Sci., Showa Univ., Tokyo, 142, Japan  
 SO Nucleosides & Nucleotides (1992), 11(2-4), 447-56  
 CODEN: NUNUD5; ISSN: 0732-8311  
 DT Journal  
 LA English  
 AB Analogs of a recently developed specific anti-HIV-1 agent HEPT, having different types of acyclic moieties, I-III were synthesized based on lithiation chemical Anti-HIV-1 activity of these analogs is also described.  
 IT 125057-15-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and sequential sulfuration and desilylation of)  
 RN 125057-15-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[3-[[((1,1-dimethylethyl)dimethylsilyl]oxy)propoxy]methyl]-5-methyl- (CA INDEX NAME)



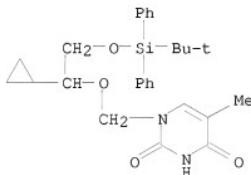
IT 125057-17-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and sulfuration of)  
 RN 125057-17-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[[((1,1-dimethylethyl)dimethylsilyl]oxy)-1-[[((1,1-dimethylethyl)dimethylsilyl]oxy)methyl]ethoxy]methyl]-5-methyl- (CA INDEX NAME)



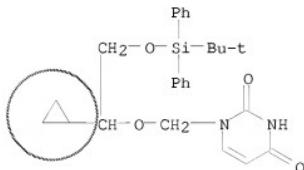
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)



L11 ANSWER 97 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1992:427024 CAPLUS  
 DN 117:27024  
 OREF 117:4907a,4910a  
 TI Convenient synthesis of ( $\pm$ )-1',2'-seco-2',3'-methanonucleosides  
 AU Nechab, Malika; Chavis, Claude; Lucas, Marc; Imbach, Jean Louis  
 CS Lab. Chim. Bio-Org., Univ. Montpellier II, Montpellier, 34095, Fr.  
 SO Synthetic Communications (1992), 22(8), 1115-26  
 CODEN: SYNCAN; ISSN: 0039-7911  
 DT Journal  
 LA English  
 OS CASREACT 117:27024  
 AB The racemic 1',2'-seco-2',3'-methanonucleosides I (B =adenine, cytosine, guanine, thymine, uracil) have been synthesized by a 5 step chemical sequence. None of the 5 nucleosides had any effect against various DNA or RNA viruses in cell cultures.  
 IT 141619-32-1P 141619-35-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and desilylation of)  
 RN 141619-32-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[1-cyclopropyl-2-[(1,1-dimethylethyl)diphenylsilyloxy]ethoxy]methyl]-5-methyl- (CA INDEX NAME)

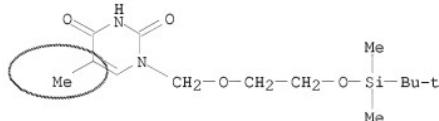


RN 141619-35-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[1-cyclopropyl-2-[(1,1-dimethylethyl)diphenylsilyloxy]ethoxy]methyl]- (CA INDEX NAME)



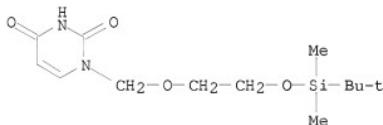
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 98 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1992:59876 CAPLUS  
 DN 116:59876  
 OREF 116:10381a,10384a  
 TI Structure-activity relationships of 1-[(2-hydroxyethoxy)methyl]-6-(phenylthio)thymine analogs: effect of substitutions at the C-6 phenyl ring and at the C-5 position on anti-HIV-1 activity  
 AU Tanaka, Hiromichi; Takashima, Hideaki; Ubasawa, Masaru; Sekiya, Kouichi; Nitta, Issei; Baba, Masanori; Shigeta, Shiro; Walker, Richard T.; De Clercq, Erik; Miyasaka, Tadashi  
 CS Sch. Pharm. Sci., Showa Univ., Shinagawa, 142, Japan  
 SO Journal of Medicinal Chemistry (1992), 35(2), 337-45  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DT Journal  
 LA English  
 OS CASREACT 116:59876  
 AB The effect of substitution on the pyrimidine moiety of the title compds. I (R = 1, R1 = Me; X = O, S) on anti-HIV-1 activity was investigated by synthesizing a series of 5-methyl-6-(arylthio) and 5-substituted-6-(phenylthio) derivs. Preparation of the 5-methyl-6-(arylthio) derivs. was carried out via lithiation of thymines II (X = O, S) followed by reaction with diaryl disulfides or via addition-elimination reaction of 1-[[2-(tert-butyldimethylsiloxy)ethoxy]methyl]-6-(phenylthio)uracil or 5-alkyl-1-[[2-tert-butyldimethylsilyloxy)ethoxy]methyl]-2-thiouracil derivs. Substitution at the meta position of the C-6-(phenylthio) ring of I (R = H, R1 = Me, X = O) improved the anti-HIV-1 activity, i.e. ED50 of I (R = 3,5-Me2, R1 = Me, X = O, S) = 0.26. When the 5-Me group was replaced by an Et or an iso-Pr group, the anti-HIV-1 activity was also improved remarkably i.e. I (R = H, R1 = Et, CHMe2, X = S) ED50, 0.11, 0.059  $\mu$ M.  
 IT 121749-98-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with diaryl disulfides)  
 RN 121749-98-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethoxy]methyl]-5-methyl- (CA INDEX NAME)

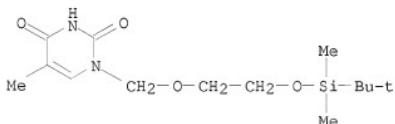


OSC.G 93 THERE ARE 93 CAPLUS RECORDS THAT CITE THIS RECORD (93 CITINGS)

L11 ANSWER 99 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1991:632736 CAPLUS  
 DN 115:232736  
 OREF 115:39693a,39696a  
 TI Activity of acyclic 6-(phenylselenenyl)pyrimidine nucleosides against human immunodeficiency viruses in primary lymphocytes  
 AU Goudgaon, Naganna M.; Schinazi, Raymond F.  
 CS Veterans Aff. Med. Cent., Atlanta, GA, USA  
 SO Journal of Medicinal Chemistry (1991), 34(11), 3305-9  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DT Journal  
 LA English  
 OS CASREACT 115:232736  
 AB Several 6-phenylselenenyl-substituted acyclouridine derivs., e.g. I (R = H, F, Cl, Me, R1 = SPh), were prepared from acyclonucleosides I (R1 = H) in 3 steps. The potency and spectrum of activity of title compds. against HIV-1 in vitro was similar to I (R = Me, R1 = SPh) (HEPT). However, whereas HEPT inhibited HIV-1 reverse transcriptase, the selenium-containing derivs. were ineffective suggesting a different mechanism of action. Of significance was the finding that the 6-phenylselenenyl acyclonucleosides inhibited also HIV-2 in primary human lymphocytes.  
 IT 121749-94-8P 121749-98-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and sequential lithiation and reaction of, with di-Ph diselenide)  
 RN 121749-94-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-[(1,1-dimethylethyl)dimethylsilyl]oxyethoxy)methyl]- (CA INDEX NAME)

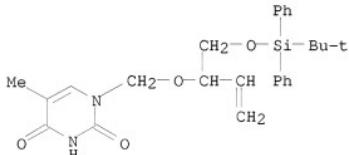


RN 121749-98-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-[(1,1-dimethylethyl)dimethylsilyl]oxyethoxy)methyl]-5-methyl- (CA INDEX NAME)



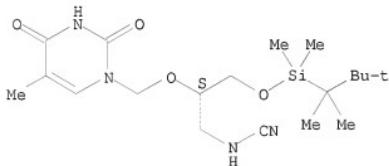
OSC.G 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

L11 ANSWER 100 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1991:536610 CAPLUS  
 DN 115:136610  
 OREF 115:23447a,23450a  
 TI Synthesis of 1',2'-seco analogs of dideoxy didehydro nucleosides as potential antiviral agents  
 AU Azymah, Muhammad; Chavis, Claude; Lucas, Marc; Imbach, Jean Louis  
 CS Lab. Chim. BioOrg., Univ. Montpellier II, Montpellier, 34095, Fr.  
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1991), (6), 1561-3  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DT Journal  
 LA English  
 OS CASREACT 115:136610  
 AB The racemic 1',2'-seco analogs of dideoxydidehydronucleosides, e.g. I (B = adenine, thymine, cytosine), have been synthesized via 6-step chemical sequence and their antiviral evaluation is reported. None of the acyclic unsatd. nucleosides had any effect against various DNA or RNA viruses in cell cultures.  
 IT 136083-18-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and desilylation of)  
 RN 136083-18-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[[1-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-2-propen-1-yl]oxy]methyl]-5-methyl- (CA INDEX NAME)



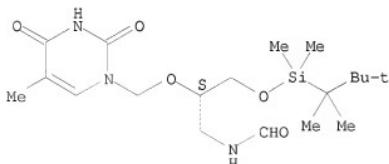
L11 ANSWER 101 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1991:409234 CAPLUS  
 DN 115:9234  
 OREF 115:1809a,1812a  
 TI Synthesis of acyclic analogs of azidothymidine, aminothymidine, and related nucleosides  
 AU Trinh Minh Chau; Florent, Jean Claude; Grierson, David S.; Monneret, Claude  
 CS Sect. Biol., Inst. Curie, Paris, 75231, Fr.  
 SO Tetrahedron Letters (1991), 32(11), 1447-8  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 AB The acyclonucleoside analogs I ( $R = N_3, NH_2, NHCl, NHCHO$ ) were prepared from epichlorohydrin and thymine.  
 IT 134160-47-7P 134160-48-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and desilylation of)  
 RN 134160-47-7 CAPLUS  
 CN Cyanamide, [2-[{(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(dimethyl(1,1,2,2-tetramethylpropyl)silyl)oxyl]propyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 134160-48-8 CAPLUS  
 CN Formanamide, N-[2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(dimethyl(1,1,2,2-tetramethylpropyl)silyl)oxyl]propyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 134160-46-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

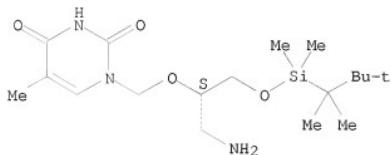
(Reactant or reagent)

(preparation and reaction of, with cyanogen bromide and sodium acetate)

RN 134160-46-6 CAPLUS

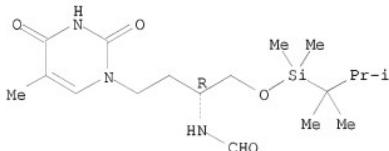
CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-amino-1-[[[dimethyl(1,1,2,2-tetramethylpropyl)silyl]oxy]methyl]ethoxy]methyl]-5-methyl-, (S)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



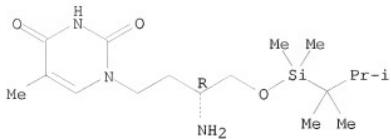
L11 ANSWER 102 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1991:62601 CAPLUS  
 DN 114:62601  
 OREF 114:10755a,10758a  
 TI Synthesis of 1-(3-R-amino-4-hydroxybutyl)thymine acyclonucleoside. Analogs as potential anti-AIDS drugs  
 AU Genevois-Borella, Arielle; Florent, Jean Claude; Monneret, Claude;  
 Grierson, David S.  
 CS Inst. Chim. Subst. Nat., Gif-sur-Yvette, 91198, Fr.  
 SO Tetrahedron Letters (1990), 31(34), 4879-82  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 OS CASREACT 114:62601  
 AB The 1-(3-R-amino-4-hydroxybutyl)thymine acyclonucleoside analogs I (R = NH<sub>2</sub>, NHCONH<sub>2</sub>, NMe<sub>2</sub>, NHCN, NC, N<sub>3</sub>) and the corresponding 3-methylamine derivs. II (R = H, NO) were prepared from the di-Bu ester of R-(--)-aspartic acid.  
 IT 131652-66-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and dehydration of)  
 RN 131652-66-9 CAPLUS  
 CN Formamide, N-[3-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)-1-[[[dimethyl(1,1,2-trimethylpropyl)silyloxy]methyl]propyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



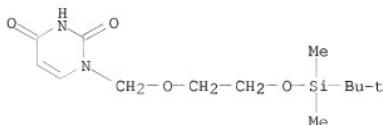
IT 131652-41-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction with triflic azide)  
 RN 131652-41-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[3-amino-4-[[dimethyl(1,1,2-trimethylpropyl)silyloxy]butyl]-5-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



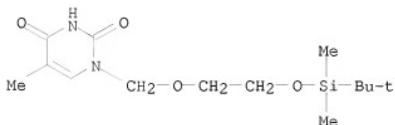
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L11 ANSWER 103 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1991:43451 CAPLUS  
 DN 114:43451  
 OREF 114:7581a,7584a  
 TI A new class of HIV-1 specific 6-substituted acyclouridine derivatives: synthesis and anti-HIV-1 activity of 5- or 6-substituted analogs of 1-((2-hydroxyethoxy)methyl)-6-(phenylthio)thymine (HEPT)  
 AU Tanaka, Hiromichi; Baba, Masanori; Hayakawa, Hiroyuki; Sakamaki, Takashi; Miyasaka, Tadashi; Ubasawa, Masaru; Takashima, Hideaki; Sekiya, Kouichi; Nitta, Issei; et al.  
 CS Sch. Pharm. Sci., Showa Univ., Tokyo, 142, Japan  
 SO Journal of Medicinal Chemistry (1991), 34(1), 349-57  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DT Journal  
 LA English  
 OS CASREACT 114:43451  
 AB Novel acyclouridine derivs. substituted at both the C(5) and C(6) positions were synthesized for the purpose of improving the activity of a recently reported HIV-1-specific lead, 1-((2-hydroxyethoxy)methyl)-6-(phenylthio)thymine (HEPT). Preparation of C(6) substituted derivs. was carried out based on the following three methods: (1) LDA (lithium diisopropylamide) lithiation of thymine derivative I (R = H) and subsequent reaction with electrophiles, (2) an addition-elimination reaction of HEPT or its 6-(phenylsulfinyl)derivative I (R = SOPh), or (3) palladium-catalyzed cross-coupling between 6-iodo derivative I (R = iodo) and terminal alkynes. Following these methods, 21 C(6) substituted analogs were synthesized. Among these II (R = cyclohexylthio, phenoxy, and benzyl) derivs. showed anti-HIV-1 (HTLV-IIIB) activity with EC50 values of 8.2, 85, and 23  $\mu$ M, resp. Preparation of C(5) substituted derivs. was based on either LTMP (lithium 2,2,6,6-tetramethylpiperide) lithiation of 6-(phenylthio)uracil derivative III (R1 = H) or the above mentioned palladium-catalyzed cross-coupling of 5-iodo-6-(phenylthio)uracil derivative III (R1 = iodo). Following these methods, 11 C(5) substituted analogs were synthesized. 5-Substituted derivs. IV [R1 = iodo, CH:CPh2, CH:CPhH-Z, and CH:CH2] were more active than HEPT, but their selectivity indexes (SI = CC50/EC50) were lower than that of HEPT. II (R = cyclohexylthio) was also evaluated against another HIV-1 strain (HTLV-IIIRf) and HIV-2 strains (LAV-2ROD and LAV-2EHO). Only HTLV-IIIRf was as sensitive as HTLV-IIIB.  
 IT 121749-94-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (lithiation and alkylation of, with benzyl bromide)  
 RN 121749-94-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyloxy]ethoxy]methyl]- (CA INDEX NAME)



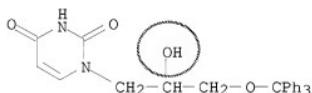
IT 121749-98-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and C-benzoylation or sulfuration of, with dialkyl disulfides)  
RN 121749-98-2 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[[{(1,1-  
dimethylethyl)dimethylsilyl]oxy}ethoxy)methyl]-5-methyl- (CA INDEX NAME)



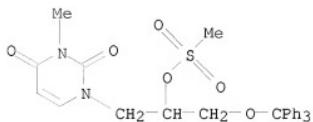
OSC.G 96 THERE ARE 96 CAPLUS RECORDS THAT CITE THIS RECORD (96 CITINGS)

L11 ANSWER 104 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1991:23653 CAPLUS  
 DN 114:23653  
 OREF 114:4217a,4220a  
 TI Stereocontrolled conversion of 1-(3-hydroxyprop-1-enyl)uracil isomers into polyfunctional 3,9-propano- and 3,9(9,3)-propeno-aza-9H-xanthines  
 AU Jokic, Milan; Skaric, Vinko  
 CS Lab. Stereochem. Nat. Prod., "Ruder Boskovic" Inst., Zagreb, 41001, Yugoslavia  
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1990), (8), 2225-32  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DT Journal  
 LA English  
 OS CASREACT 114:23653  
 AB With DBU, 1-(3-azido-, and 1-(3-trityloxy-2-methylsulfonyloxypropyl)-3-methyluracil underwent elimination to give the E- and Z-prop-1-enyl isomers. Treatment of (E)- and (Z)-1-(3-hydroxyprop-1-enyl)-3-methyluracil with Br<sub>2</sub>-MeOH generated asym. centers at C-1' and C-2', providing threo- and erythro-5-bromo-1-(2-bromo-3-hydroxy-1-methoxypropyl)-3-methyluracil (I). Conversion of I into erythro- and threo-5-bromo-1-(2,3-epoxy-1-methoxypropyl)-3-methyluracil was accomplished under mild DBU-elimination conditions. The reaction of the diastereoisomeric epoxides with NaN<sub>3</sub>-DMF produced erythro- and threo-1-(3-azido-2-hydroxy-1-methoxypropyl)-3-methyluracil. These isomers underwent two types of intramol. cyclization reaction, which gave trans- and cis-2-azidomethyl-3-methoxy-6-methyl-2,3-dihydrooxazolo[3,2-c]pyrimidines-5,7-dione (II) and cis- and trans-11-hydroxy-12-methoxy-1-methyl-3,9-propano-8-aza-9H-xanthine (III). The elimination reaction of 12-methoxy-1-methyl-3,9-propano-8-aza-9H-xanthine with DBU gave 12-methoxy-1-methyl-9,3-propeno-8-aza-9H-xanthine (IV). Its 3,9-propeno isomer was obtained from a DBU-elimination of 11-bromo-10-methoxy-1-methyl-3,9-propano-8-aza-9H-xanthine. IV was converted into 11-bromo-10,12-dimethoxy-1-methyl-3,9-propano-8-aza-9H-xanthine on treatment with Br-MeOH.  
 IT 87009-17-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (methylation of)  
 RN 87009-17-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-hydroxy-3-(triphenylmethoxy)propyl]- (CA INDEX NAME)



IT 130967-32-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and elimination reaction of)  
 RN 130967-32-7 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 3-methyl-1-[2-[(methylsulfonyl)oxy]-3-

(triphenylmethoxy)propyl- (CA INDEX NAME)

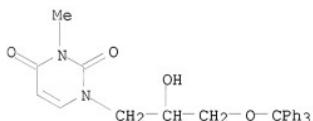


IT 130967-31-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and mesylation of)

RN 130967-31-6 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-hydroxy-3-(triphenylmethoxy)propyl]-3-methyl- (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 105 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1990:591849 CAPLUS  
 DN 113:191849  
 OREF 113:32497a,32500a  
 TI Isosteric oligonucleotide analogs containing sulfur  
 IN Benner, Steven Albert  
 PA Switz.  
 SO PCT Int. Appl., 88 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8912060	A1	19891214	WO 1989-US2323	19890526
	W: AU, JP RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	US 5216141	A	19930601	US 1988-202528	19880606
	AU 8937654	A	19900105	AU 1989-37654	19890526
	AU 635209	B2	19930318		
	EP 418309	A1	19910327	EP 1989-906936	19890526
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 03505452	T	19911128	JP 1989-506581	19890526
PRAI	US 1988-202528	A	19880606		
	WO 1989-US2323	A	19890526		

AB Oligonucleotides containing isosteric S linkages instead of a phosphate, e.g. I, which are resistant to chemical and in vivo enzymic degradation, lipophilic, and thereby easily cross biol. barriers, and thus useful as, e.g. probes for cDNA, can be prepared from rigid or flexible isosteric building blocks [II, III, and IV; X = O, CH<sub>2</sub>; R = OH, R<sub>1</sub> = SH; or R = SH, R<sub>1</sub> = OH; B = heterocycle ring selected from (aza)pyrimidine, (aza)purine, pyrrolopyrimidine, pyrazolopyrimidine, triazolopyrimidine, imidazolopyrimidine, pyrrolopyridine, pyrazolopyridine, and triazolopyridine, which may be functionalized with NH<sub>2</sub>, HO, halo, acylamino, or acylhydroxy]. Thus, ozonolysis of 2-(pivaloyloxymethyl)cyclohex-4-enol (V; R<sub>3</sub> = pivaloyl) (preparation given) in MeOH and treatment of the resulting 3,4-trans-1-methoxy-3-pivaloyloxymethyl-4-(2'-hydroxyethyl)tetrahydrofuran with Dowex W50 in refluxing FMe gave a 2,8-dioxa[1.2.3]bicyclooctane (VI) which was stirred 15 h at room temperature with

bis(trimethylsilyloxy)pyrimidine

in the presence of CF<sub>3</sub>SO<sub>3</sub>SiMe<sub>3</sub> in MeCN to give II (X = O, R = OH, R<sub>1</sub> = pivaloyl, B = 1-uracilyl). Reaction of the latter with EtO<sub>2</sub>CN:NC<sub>2</sub>Et, Ph<sub>3</sub>P, and AcSH in THF gave II (X = O, R = SAC, R<sub>1</sub> = pivaloyloxy, B = 1-uracilyl) which could be conveniently stored and deprotected immediately prior to condensation, by reduction with LiBEt<sub>3</sub>H (super-hydride) in THF to give a bishomonucleoside II (X = O, R = SH, R<sub>1</sub> = OH, B = 1-uracilyl). No synthetic examples for I or other oligonucleotides but only synthetic schemes were given. I bind to complementary A-C-C-T-C-C-T (no data).

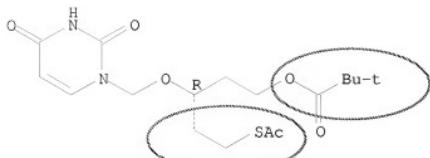
IT 128435-65-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as intermediate for acyclic nucleoside analog)

RN 128435-65-4 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 5-(acetylthio)-3-[(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]pentyl ester, (R)- (9CI) (CA INDEX NAME)

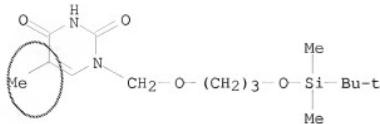
Absolute stereochemistry.



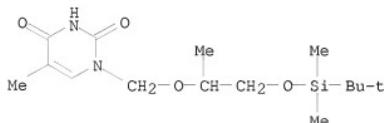
OSC.G 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)  
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 106 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1990:77870 CAPLUS  
 DN 112:77870  
 OREF 112:13331a,13334a  
 TI 6-substituted acyclic pyrimidine nucleoside derivatives and antiviral agents containing same as active ingredients  
 IN Miyasaka, Tadashi; Tanaka, Hiromichi; De Clercq, Erik Desire Alice; Baba, Masanori; Walker, Richard Thomas; Ubasawa, Masaru  
 PA Mitsubishi Kasei Corp., Japan  
 SO PCT Int. Appl., 90 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

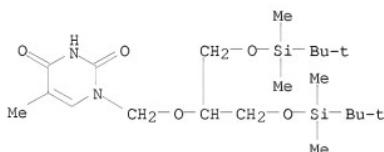
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 8909213	A1	19891005	WO 1989-JP347	19890331
W: AU, CH, HU, JP, KR, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8933575	A	19891016	AU 1989-33575	19890331
AU 611284	B2	19910606		
ZA 8902407	A	19891129	ZA 1989-2407	19890331
ES 2013664	A6	19900516	ES 1989-1127	19890331
EP 371139	A1	19900606	EP 1989-904204	19890331
EP 371139	B1	19941012		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
DD 283613	A5	19901017	DD 1989-327145	19890331
CH 676712	A5	19910228	CH 1989-4102	19890331
HU 55005	A2	19910429	HU 1986-20	19890331
HU 206328	B	19921028		
CA 1334535	C	19950221	CA 1989-595345	19890331
JP 07062005	B	19950705	JP 1989-503810	19890331
US 5112835	A	19920512	US 1989-449930	19891121
PRAI JP 1988-76677	A	19880331		
WO 1989-JP347	A	19890331		
OS MARPAT 112:77870				
AB The title compds. [I; R1 = H, halo, alkyl, alkenyl, alkylcarbonyl, arylcarbonyl, arylcarbonylalkyl, arylthio, aralkyl; R2 = arylthio, cycloalkylthio, arylsulfoxido, (cyclo)alkylsulfoxido, alkenyl, alkynyl, aralkyl, arylcarbonyl, arylcarbonylalkyl, aryloxy; R3 = hydroxyalkyl where alkyl may be interrupted by O; X = O, S, NH2; Y = O, S; A = NH]; which have antiviral activity particularly against retroviruses such as human immunodeficiency virus (HIV), are prepared Thus, a solution of (Me2CH)2NLI in THF was added dropwise at -70° to a solution of 1-[(2-tert-butylidimethylsilyloxyethoxy)methyl]thymine in THF, followed by a solution of (Phs)2 in THF at -70°. The resulting mixture was allowed to react 1 h to give 73% 1-[(2-tert-butylidimethylsilyloxyethoxy)methyl]-6-phenylthiothymine which was treated with AcOH in aqueous THF to give 91% 1-((2-hydroxyethoxy)methyl)-6-phenylthiothymine. Eight I at 0.98-34.0 μM inhibited 50% infection of human T cell clone MT-4 cells with HIV.				
IT 125057-15-0	125057-16-1	125057-17-2		
125057-18-3				
RL: RCT (Reactant); RACT (Reactant or reagent) (lithiation and phenylthiolation of, by di-Ph disulfide)				
RN 125057-15-0 CAPLUS				
CN 2,4(1H,3H)-Pyrimidinedione, 1-[[3-[(1,1-dimethylethyl)dimethylsilyl]oxy]propoxy]methyl- (CA INDEX NAME)				



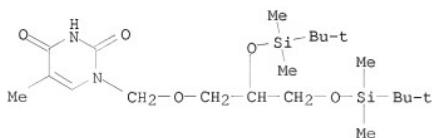
RN 125057-16-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-methylethoxy]methyl- (CA INDEX NAME)



RN 125057-17-2 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-[(1,1-dimethylethyl)dimethylsilyloxy]methyl]ethoxy]methyl-5-methyl- (CA INDEX NAME)

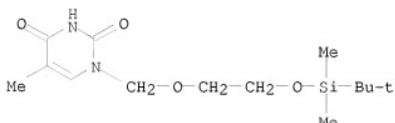


RN 125057-18-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2,3-bis[(1,1-dimethylethyl)dimethylsilyl]oxy]propoxy]methyl-5-methyl- (CA INDEX NAME)



IT 121749-98-2P

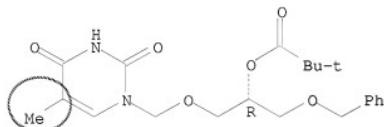
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as intermediate for virucide)  
RN 121749-98-2 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[[[(1,1-  
dimethylethyl)dimethylsilyl]oxy]ethoxy)methyl]-5-methyl- (CA INDEX NAME)



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)  
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

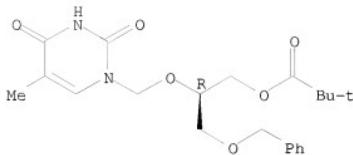
L11 ANSWER 107 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1990:50780 CAPLUS  
 DN 112:50780  
 OREF 112:8625a,8628a  
 TI Oligonucleotides containing flexible nucleoside analogs  
 AU Schneider, K. Christian; Benner, Steven A.  
 CS Lab. Org. Chem., ETH, Zurich, CH-8092, Switz.  
 SO Journal of the American Chemical Society (1990), 112(1), 453-5  
 CODEN: JACSAT; ISSN: 0002-7863  
 DT Journal  
 LA English  
 OS CASREACT 112:50780  
 AB Oligodeoxyribonucleotides incorporating  $\geq 1$  oligonucleoside analogs missing carbon 2' (flexible nucleoside analogs) were synthesized, and the melting temps. of duplexes formed with complementary natural oligonucleotides were measured. The melting temperature of duplex DNA was lowered by 9-15° for each floppy nucleoside incorporated into 1 strand. This result suggests that such analogs are, in their simplest form, unsuitable as anti-sense drugs or as probes, and is relevant to the interesting suggestion that oligonucleotides composed of flexible building blocks were the 1st self-replicating life forms.  
 IT 124318-79-2P 124340-11-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and deprotection of)  
 RN 124318-79-2 CAPLUS  
 CN Propanoic acid, 2,2-dimethyl-, 1-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]methyl]-2-(phenylmethoxy)ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 124340-11-0 CAPLUS  
 CN Propanoic acid, 2,2-dimethyl-, 2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-(phenylmethoxy)propyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 124318-82-7P

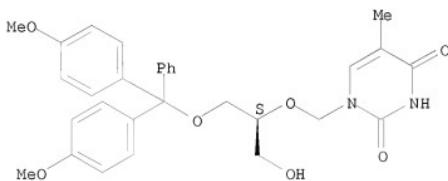
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with cyanoethyldiisopropylphosphoramidochloridite)

RN 124318-82-7 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1S)-2-[bis(4-methoxyphenyl)phenylmethoxy]-1-(hydroxymethyl)ethoxy]methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 124318-80-5P 124318-81-6P

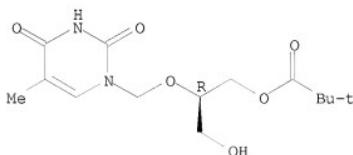
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with dimethoxytrityl chloride)

RN 124318-80-5 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-hydroxypropyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

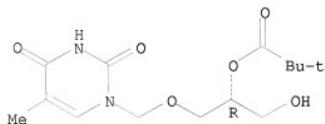


RN 124318-81-6 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-

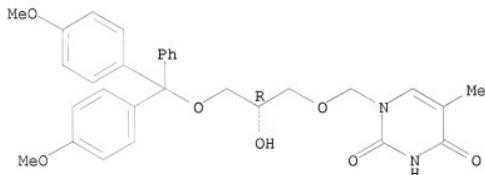
pyrimidinyl)methoxy]-1-(hydroxymethyl)ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 124318-83-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 124318-83-8 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(3-[bis(4-methoxyphenyl)phenoxy]-2-hydroxypropoxy)methyl]-5-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 67 THERE ARE 67 CAPLUS RECORDS THAT CITE THIS RECORD (71 CITINGS)

L11 ANSWER 108 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1989:595313 CAPLUS  
 DN 111:195313  
 OREF 111:32479a,32482a

TI A novel lead for specific anti-HIV-1 agents:

1-[(2-hydroxyethoxy)methyl]-6-(phenylthio)thymine

AU Miyasaka, Tadashi; Tanaka, Hiromichi; Baba, Masanori; Hayakawa, Hiroyuki;  
 Walker, Richard T.; Balzarini, Jan; De Clercq, Erik  
 CS Sch. Pharm. Sci., Showa Univ., Tokyo, 142, Japan  
 SO Journal of Medicinal Chemistry (1989), 32(12), 2507-9  
 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

OS CASREACT 111:195313

AB Uracil acyclonucleosides I ( $R = H$ ;  $R1 = H, F, Cl, Br, Me$ ;  $R2 = SPh$ , *iodo*) were synthesized via lithiation of I ( $R = SiMe2CMe3$ ;  $R1 = H, F, Cl$ ;  $R2 = H$ ) and reaction of the C-6 lithiated species with  $I_2$  or  $PhSSPh$ . Among the compds. synthesized, I ( $R = H$ ,  $R1 = Me$ ,  $R2 = SPh$ ) was a highly specific anti-HIV-1 agent with a selectivity index comparable to that of 2',3'-dideoxyadenosine. The compound showed no activity against HIV-2 and its triphosphate did not inhibit HIV-1 reverse transcriptase. This suggests that this compound manifests its activity through a mechanism different from that so far known for other nucleoside analogs.

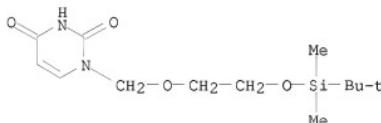
IT 121749-94-8P 121749-98-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and sequential lithiation and reaction of, with iodine or di-Ph disulfide)

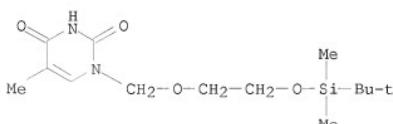
RN 121749-94-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethoxy]methyl- (CA INDEX NAME)



RN 121749-98-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyl]oxy]ethoxy]methyl- (CA INDEX NAME)



OSC.G 191 THERE ARE 191 CAPLUS RECORDS THAT CITE THIS RECORD (196 CITINGS)



L11 ANSWER 109 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1989:458280 CAPLUS  
 DN 111:58280  
 OREF 111:9907a,9910a  
 TI Preparation and testing of 6-iodoacyclouridine derivatives as antitumor agents.

IN Miyasaka, Sada; Tanaka, Hiromichi; Hayakawa, Hiroyuki  
 PA Yama Shouy Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01006260	A	19890110	JP 1987-160765	19870627
PRAI JP 1987-160765		19870627		
OS MARPAT 111:58280				

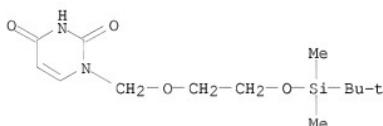
AB The title compds. (I; R = iodo, R1 = H, halo, lower alkyl; R2 = H) (II) were prepared as antitumor agents. Silylation of acyclouridine with ClSiMe2CMe3 in DMF containing imidazole and treatment of the resulting I (R = R1 = H, R2 = SiMe2CMe3) with (iso-Pr)2NLi in THF followed by iodine at -70° gave I (R = iodo, R1 = H, R2 = SiMe2CMe3). Deprotection of the latter with aqueous AcOH in THF gave I (R = iodo, R1 = R2 = H). I (R = iodo, R1 = Me, R2 = H) (III) inhibited the proliferation of mouse leukemia cells L5178Y with an IC50 of 3.2 µg/mL. Tablets (100 mg) were formulated from III 10, cornstarch 65, carboxycellulose 20, polyvinylpyrrolidone 38, and Ca stearate 2mg.

IT 121749-94-8P 121749-98-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and lithiation-iodination of, in preparation of antitumor agent)

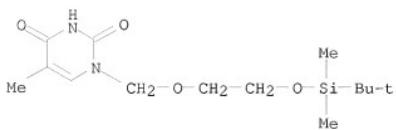
RN 121749-94-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[{2-[{(1,1-dimethylethyl)dimethylsilyloxy]ethoxy}methyl]- (CA INDEX NAME)



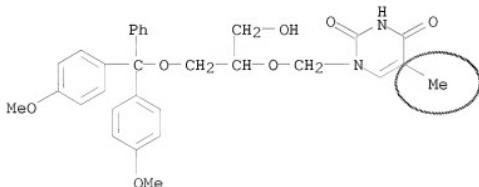
RN 121749-98-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[{2-[{(1,1-dimethylethyl)dimethylsilyloxy]ethoxy}methyl]-5-methyl- (CA INDEX NAME)

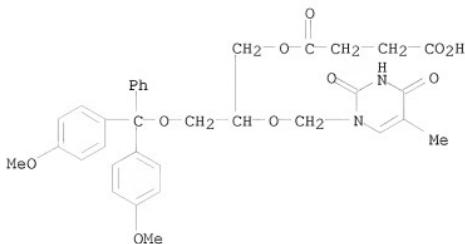


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 110 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1989:173666 CAPLUS  
 DN 110:173666  
 OREF 110:28829a,28832a  
 TI Preparation of glyceronucleoside phosphoramidite synthons and their use in the solid-phase synthesis of acyclic oligonucleotides  
 AU Usman, Nassim; Juby, Carl D.; Ogilvie, Kelvin K.  
 CS Dep. Chem., McGill Univ., Montreal, QC, H3A 2K6, Can.  
 SO Tetrahedron Letters (1988), 29(38), 4831-4  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 OS CASREACT 110:173666  
 AB Title synthons DMTOCH2CH(OCH2B)CH2OP(OMe)N(CHMe2)2 [DMT = dimethoxytrityl, B = N6-benzoyladenyl, thymine (Thy)] were prepared by esterification using (Me2CH)2NP(OMe)Cl. Oligacyclonucleotides, 2-8 units long, were synthesized using these synthons on either controlled pore glass or silica gel supports with average coupling yields up to 98%. The preparation of DMTOCH2CH(OCH2Thy)CH2O2CCH2C2C6Cl5 for the derivatization of long chain alkylamine controlled pore glass is also described.  
 IT 120188-28-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (esterification of, with (diisopropylamino)phosphoramidic chloride Me ester, synthesis of acyclic oligonucleotides and)  
 RN 120188-28-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[bis(4-methoxyphenyl)phenylmethoxy]-1-(hydroxymethyl)ethoxy]methyl- 5-methyl- (CA INDEX NAME)



IT 120188-25-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and esterification with pentachlorophenol)  
 RN 120188-25-2 CAPLUS  
 CN Butanedioic acid, 1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxylpropyl] ester (CA INDEX NAME)

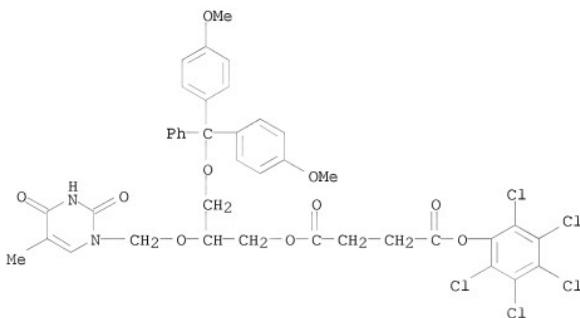


IT 120188-26-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for derivatization of long-chain alkylamine controlled pore glass)

RN 120188-26-3 CAPLUS

CN Butanedioic acid, 1-[3-[bis(4-methoxyphenyl)phenylmethoxy]-2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]propyl]4-(2,3,4,5,6-pentachlorophenyl) ester (CA INDEX NAME)



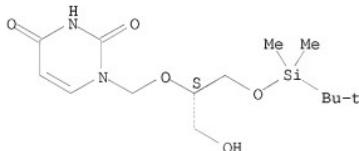
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L11 ANSWER 111 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1989:115272 CAPLUS  
 DN 110:115272  
 OREF 110:19033a,19036a  
 TI Preparation of acyclic nucleosides cyclic phosphoramidates having antiviral and anticancer activities  
 IN Takaku, Hiroshi; Yoshida, Shiro; Aoki, Tomomi; Akiba, Katsushi  
 PA Yodogawa Pharmaceutical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 63165373	A	19880708	JP 1986-203962	19860829
PRAI JP 1986-203962		19860829		
OS MARPAT 110:115272				

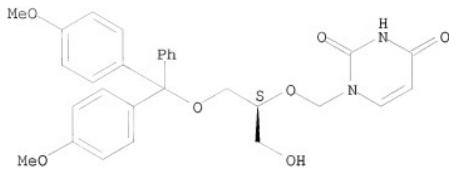
AB The title compdms. [I; R = Q, Q1, tert-BuSiMe<sub>2</sub>; R1-R3 = H, lower alkoxy; R<sub>4</sub> = H, alkyl; R<sub>5</sub> = H, alkyl, aryl, aralkyl; R; B = purine, pyrimidine, or azole ring] (II), having anticancer and antiviral activities, were prepared Reaction of I (R = R<sub>5</sub> = H, B = uracil residue) with dimethoxytrityl chloride in pyridine, condensation of the resulting I (R = 4,4'-dimethoxytrityl, R<sub>5</sub> = H) with 2-chloro-3-methyl-1-oxa-3-aza-2-phosphacyclopentane in THF containing (iso-Pr)<sub>2</sub>NET at -50°, and oxidation of the product HCl salt with m-CIC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>OH gave I (R = 4,4'-dimethoxytrityl, R<sub>5</sub> = Q1, R<sub>4</sub> = Me) which was deprotected with ZnBr<sub>2</sub> in MeNO<sub>2</sub> to give I (R = H, R<sub>5</sub> = R<sub>1</sub>; R<sub>4</sub> = Me).  
 IT 119254-90-9P 119254-91-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and condensation of, with chloromethyloxazaphosphacyclopentane)  
 RN 119254-90-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-[(1,1-dimethylethyl)dimethylsilyl]oxy)-1-(hydroxymethyl)ethoxy]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 119254-91-0 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-[bis(4-methoxyphenyl)phenylmethoxy]-1-(hydroxymethyl)ethoxy]methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

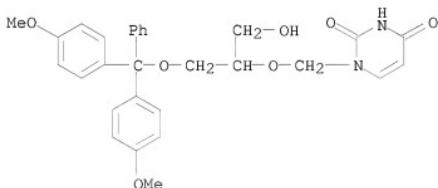


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 112 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1988:611401 CAPLUS  
 DN 109:211401  
 OREF 109:34991a,34994a  
 TI Preparation of acyclic nucleosides having antitumor activities  
 IN Takaku, Hiroshi; Yoshida, Shiro; Aoki, Tomomi; Akiba, Katsushi  
 PA Yodogawa Pharmaceutical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 63060929	A	19880317	JP 1986-203961	19860829
PRAI JP 1986-203961		19860829		
OS MARPAT 109:211401				

AB The title compds. [I; R,R1 = H, alkyl, aryl, aralkyl, Q, Me<sub>3</sub>CMe<sub>2</sub>Si, Q1; R1-R3 = H, lower alkoxy; R4 = H, alkyl; B = purine, pyrimidine, etc. ring residue] were prepared as antitumor agents. After uracil (1.12g) was 0.5  
 azeotropically dried by evaporation with anhydrous pyridine 3 times in vacuo,  
 g (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> and 35 mL (Me<sub>3</sub>Si)<sub>2</sub>NH were added and the mixture was refluxed for  
 40 min, cooled and concentrated in vacuo. To the residue, 25 mL CH<sub>2</sub>Cl<sub>2</sub> and 004  
 g Bu<sub>4</sub>NI were added and the solution was refluxed for 10 min and cooled to  
 room temperature. 1,3-Dibenzylxyloxy-2-(chloromethoxy)propane was added and the  
 mixture was refluxed for 2 h to give 80%  
 1-[1,3-dibenzylxyloxy-2-propoxy)methyl]uracil. This compound at 10 µg/mL  
 in vitro inhibited by 36% the proliferation of P388 mouse leukemia.  
 IT 114477-45-1P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation)  
 (preparation of, as antitumor agent)  
 RN 114477-45-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2-[bis(4-methoxyphenyl)phenylmethoxy]-1-  
 (hydroxymethyl)ethoxy)methyl]- (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 113 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1988:493532 CAPLUS

DN 109:93532

OREF 109:15629a,15632a

TI Preparation of glycerides and antitumor agents containing them

IN Tsushima, Susumu; Kozai, Yoshio

PA Takeda Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 82 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

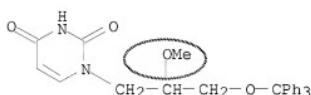
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62174011	A	19870730	JP 1986-231427	19860929
	JP 07080766	B	19950830		
PRAI	JP 1985-219874	A1	19851001		
AB	R10CH2CHR2CH2X(C(O)Y-R3-ZR4)I; R1 = alkyl, alkylcarbamoyl; R2 = H, (un)substituted OH, cyclic or (un)substituted NH2; R3 = bond, (un)substituted alkylene; R4 = H, alkyl, aralkyl; X, Y = O, S, (un)substituted NH; Y = X = NH or Y and R4 form a ring; Z = (un)substituted NH or N-containing heterocyclyl, useful as antitumor agents, were prepared 2-(Aminomethyl)pyridine and crude 2-O-methyl-3-O-phenoxy carbonyl-1-O-(octadecylcarbamoyl)glycerin [prepared from 2-O-methyl-1-O-(octadecylcarbamoyl)glycerin and PhO2CCl in CH2Cl2 containing pyridine] in CHCl3 was refluxed 12 h to give 84.7% 2-O-methyl-3-O-[N-(2-pyridylmethyl)carbamoyl-1-O-(octadecylcarbamoyl)glycerin which was N-acetylated with Ac2O and Et3N in CHCl3 under reflux and then quaternized with EtI under reflux to give 3-N-acetyl-N-(N'-ethylpyridin-2-yl)methyl)carbamoyl-2-methyl-1-(octadecylcarbamoyl)glycerin chloride (II). Injections containing I were prepared II inhibited the proliferation of KB cells with an ED50 of 0.16 µg/mL.				

IT 100489-04-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and alkylation of, by (chloromethyl)pyridine)

RN 100489-04-1 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-methoxy-3-(triphenylmethoxy)propyl]- (CA INDEX NAME)

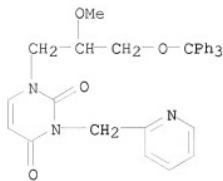


IT 100489-05-2P 100489-09-6P

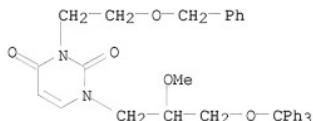
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and detritylation of)

RN 100489-05-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-methoxy-3-(triphenylmethoxy)propyl]-3-(2-pyridinylmethyl)- (CA INDEX NAME)

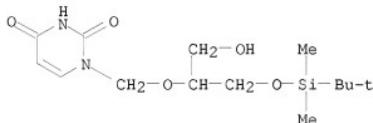


RN 100489-09-6 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-methoxy-3-(triphenylmethoxy)propyl]-3-[2-(phenylmethoxy)ethyl]- (CA INDEX NAME)

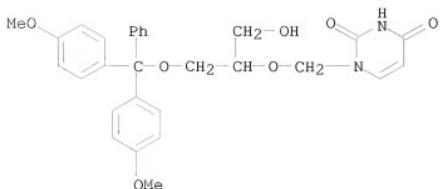


OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 114 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1988:204992 CAPLUS  
 DN 108:204992  
 OREF 108:33701a,33704a  
 TI Synthesis and biological evaluation of some acyclic nucleoside cyclic phosphoramidate derivatives  
 AU Takaku, Hiroshi; Ito, Tsunehiko; Yoshida, Shiro; Aoki, Tomomi; De Clercq, Erik  
 CS Lab. Bioorg. Chem., Chiba Inst. Technol., Chiba, 275, Japan  
 SO Nucleosides & Nucleotides (1987), 6(4), 793-802  
 CODEN: NUNUD5; ISSN: 0732-8311  
 DT Journal  
 LA English  
 OS CASREACT 108:204992  
 AB The acyclic nucleosides I [R = H, R, R1 = dimethoxytrityl; R = H, R1 = Si(CMe3)2Me2] were treated with 2-chloro-3-methyl-1-oxa-3-aza-2-phosphacyclopentane (II) in the presence of diisopropylethylamine to give the corresponding phosphoramidite derivs., which were oxidized with m-chloroperbenzoic acid to the phosphoramidate derivs. III (R, R1 same). Treatment of III (R = H, R, R1 = dimethoxytrityl) with ZnBr2 in CH3NO2 gave III (R1 = H). Attempts at desilylation of III by Bu4NF resulted in opening of the phosphoramidate ring. The newly synthesized compds. were evaluated for antiviral and antitumor cell activity.  
 IT 114477-47-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and phosphorylation of, with  
 chloromethyloxazaphosphacyclopentene)  
 RN 114477-47-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[{2-[{(1,1-dimethylethyl)dimethylsilyl]oxy}-1-(hydroxymethyl)ethoxy]methyl]- (CA INDEX NAME)



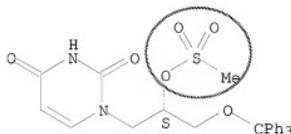
IT 114477-45-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and phosphorylation of, with  
 chloromethyloxazaphosphacyclopentene)  
 RN 114477-45-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[{2-[bis(4-methoxyphenyl)phenylmethoxy]-1-(hydroxymethyl)ethoxy]methyl]- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 115 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1987:138142 CAPLUS  
 DN 106:138142  
 OREF 106:22529a,22532a  
 TI Anti-cyclization reactions of enantiomeric 1-(2,3-dihydroxypropyl)uracil derivatives  
 AU Skaric, V.; Kasnar, B.  
 CS Lab. Stereochem. Nat. Prod., "Rudjer Boskovic" Inst., Zagreb, 41001,  
 Yugoslavia  
 SO Croatica Chemica Acta (1986), Volume Date 1985, 58(4), 583-92  
 CODEN: CCACAA; ISSN: 0011-1643  
 DT Journal  
 LA English  
 AB 2-Hydroxymethyltetrahydrooxazolo[3,2-c]pyrimidine-5,7-(4H,6H)-diones (R,S)-I, (R)-I, and (S)-I (R = H) were prepared. The CH<sub>2</sub>N<sub>2</sub> methylation of I (R = H) gave I (R = Me). For the synthesis of (R)- and (S)-I (R = H) (R)- and (S)-5-bromo-1-(2,3-dihydroxypropyl)uracil were treated with KCN in DMF. (R,S)-6-Cyano-1-(2,3-dihydroxypropyl)uracil underwent anti-cyclization yielding (R,S)-I (R = H) if heated in DMSO at 40°.  
 IT 107262-85-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (elimination of methanesulfonic acid from)  
 RN 107262-85-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(methylsulfonyl)oxy]-3-(triphenylmethoxy)propyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L11 ANSWER 116 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1986:88143 CAPLUS

DN 104:88143

OREF 104:13975a,13978a

TI Glycerol derivatives and their pharmaceutical use

IN Nomura, Hiroaki; Nishikawa, Kohei; Tushima, Susumu

PA Takeda Chemical Industries, Ltd. , Japan

SO Eur. Pat. Appl., 219 pp.

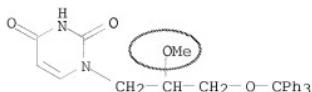
CODEN: EPXXDW

DT Patent

LA English

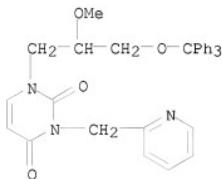
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 157609	A2	19851009	EP 1985-302202	19850329
	EP 157609	A3	19870128		
	EP 157609	B1	19921014		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE WO 8504398				
	W: MC	A1	19851010	WO 1984-JP163	19840403
	WO 8602349	A1	19860424	WO 1984-JP476	19841011
	W: MC				
	WO 8604894	A1	19860828	WO 1985-JP62	19850215
	W: MC				
	AT 81501	T	19921015	AT 1985-302202	19850329
PRAI	WO 1984-JP163	A	19840403		
	WO 1984-JP476	A	19841011		
	WO 1985-JP62	A	19850215		
	EP 1985-302202	A	19850329		
AB	R10CH2CHR2CH2COZ1Z2Z3R3 [I; R1 = alkyl, alkylcarbamoyl; R2 = H, (un)modified OH, amino, cyclic amino; R3 = H, alkyl, aralkyl; Z, Z1 = O, S, (un)substituted imino; Z2 = bond, (un)substituted alkylene; Z3 = imino, N heterocycle; when Z1 = imino, it may form a ring with Z or R3] (>170 compds) were prepared Thus, Me(CH2)17OCH2CH(CH2R4)OCH2Ph (II, R4 = OH) was esterified with PhO2CCl to give II (R4 = PhO2CO) which was treated with Me2NCH2CH2NH2 to give II (R4 = Me2NCH2CH2NHCO2). The latter was successively debenzylated by hydrogenation over Pd/C, acetylated, and quaternized with MeI to give Me(CH2)17OCH2CH(OAc)CH2O2CNACH2CH2N+Me3I- (III). At 3 + 10-6M III totally inhibited blood platelet aggregation. I are also effective antihypotensives in mice at 0.1-1.0 mg/kg i.v.				
IT	100489-04-1P	100489-05-2P	100489-09-6P		
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)				
	(preparation of, as antihypotensive and platelet aggregation inhibitor)				
RN	100489-04-1	CAPLUS			
CN	2,4(1H,3H)-Pyrimidinedione, 1-[2-methoxy-3-(triphenylmethoxy)propyl]-				
	INDEX NAME)				



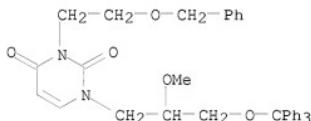
RN 100489-05-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-methoxy-3-(triphenylmethoxy)propyl]-3-(2-pyridinylmethyl)- (CA INDEX NAME)



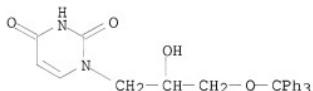
RN 100489-09-6 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-methoxy-3-(triphenylmethoxy)propyl]-3-[2-(phenylmethoxy)ethyl]- (CA INDEX NAME)

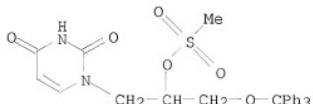


OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L11 ANSWER 117 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1983:505623 CAPLUS  
 DN 99:105623  
 OREF 99:16273a,16276a  
 TI Homologation and intramolecular cyclization reactions in aliphatic deoxyuridine analogs series  
 AU Skaric, Vinko; Jokic, Milan  
 CS Lab. Stereochem. Nat. Prod., "Rudjer Boskovic" Inst., Zagreb, 41001, Yugoslavia  
 SO Croatica Chemica Acta (1983), 56(1), 125-39  
 CODEN: CCACAA; ISSN: 0011-1643  
 DT Journal  
 LA English  
 AB The cyanation of 1-(2,3-epoxypropyl)uracil, followed by the ethanolysis of the resulting 3'-cyano compound to 3'-ethoxycarbonyl derivative, led to the synthesis of 1-(2,4-dihydroxybutyl)uracil (I). The oxidation of 1-allyluracil by KMnO<sub>4</sub> gave 1-(2,3-dihydroxypropyl)uracil (II). The intramol. transformations of suitably activated II were studied and the structures of the resulting oxazolo pyrimidinone (III), 1-(2,3-dihydroxypropyl)-2-O-methyluracil and their mesyl, azido, and trityl derivs. are described. In addition 2-azidomethyl-2,3-dihydro-7H-oxazolo[3,2-a]pyrimidin-7-one was converted into 2-aminomethyl derivative  
 IT 87009-17-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and mesylation of)  
 RN 87009-17-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-hydroxy-3-(triphenylmethoxy)propyl]- (CA INDEX NAME)



IT 87009-18-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reactions of)  
 RN 87009-18-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-[(methylsulfonyl)oxy]-3-(triphenylmethoxy)propyl]- (CA INDEX NAME)

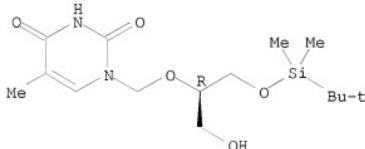


OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)



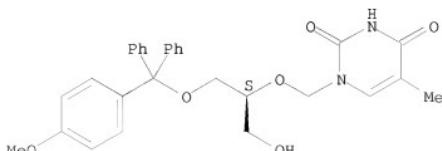
L11 ANSWER 118 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1980:495534 CAPLUS  
 DN 93:95534  
 OREF 93:15333a,15336a  
 TI Ring open analogs of deoxynucleotides  
 AU Ogilvie, Kelvin K.; Gillen, Michael F.  
 CS Dep. Chem., McGill Univ., Montreal, QC, H3A 2K6, Can.  
 SO Tetrahedron Letters (1980), 21(4), 327-30  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 AB 9-[Bis(hydroxymethyl)methoxymethyl]adenine (I) was prepared (27%) from 6-chloropurine by sequential condensation reaction with ( $\text{PhCH}_2\text{OCH}_2$ ) $_2\text{CHCl}_2$  (II), amination, and debenzylation. Similarly, condensation reaction of thymine with II, followed by debenzylation, gave 57% 1-[bis(hydroxymethyl)methoxymethyl]thymine (III). Dinucleoside monophosphates were prepared from acyclic deoxynucleoside analogs I and III, and tested with spleen and snake venom phosphodiesterases.  
 IT 74554-19-1P 74564-18-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and condensation reaction of, with protected nucleoside and trichloroethyl phosphorodichloridite)  
 RN 74554-19-1 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-[(1,1-dimethylethyl)dimethylsilyloxy]-1-(hydroxymethyl)ethoxy]methyl]-5-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



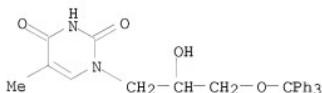
RN 74564-18-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[[2-hydroxy-1-[[[(4-methoxyphenyl)diphenylmethoxy]methyl]ethoxy]methyl]-5-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

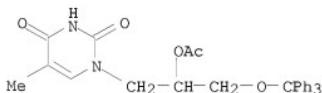


OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

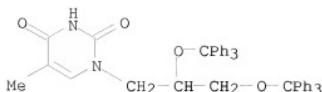
L11 ANSWER 119 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1980:147107 CAPLUS  
 DN 92:147107  
 OREF 92:23925a,23928a  
 TI Aliphatic thymidine and deoxyuridine analogs  
 AU Skaric, V.; Erben, D.; Raza, Z.; Skaric, D.  
 CS Lab. Stereochem. Nat. Prod., "Ruder Boskovic" Inst., Zagreb, 41001,  
 Yugoslavia  
 SO Croatica Chemica Acta (1979), 52(3), 281-92  
 CODEN: CCACAA; ISSN: 0011-1643  
 DT Journal  
 LA English  
 AB The oxidation of 1-allyluracil and 1-allylthymine by the AgOAc-iodine method  
 gave the corresponding 1-(2,3-dihydroxypropyl) derivs. The selective  
 tritylation of the glycol I (R = R1 = H) into I (R = H, R1 = CPh3) made  
 feasible the synthesis of 1-(2,3-dihydroxypropyl)thymine-2'-phosphate as  
 Ba salt [I, R = P(O)(O)2Ba, R1 = H] and thymidyl  
 $(5' \rightarrow 2')-1-(2,3\text{-dihydroxypropyl})\text{thymine}$  as NH4 salt.  
 IT 73183-92-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and acetylation of)  
 RN 73183-92-3 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-hydroxy-3-(triphenylmethoxy)propyl]-5-  
 methyl- (CA INDEX NAME)



IT 73183-93-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and detritylation of)  
 RN 73183-93-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-(acetoxy)-3-(triphenylmethoxy)propyl]-5-  
 methyl- (CA INDEX NAME)

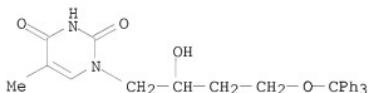


IT 73184-03-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 73184-03-9 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2,3-bis(triphenylmethoxy)propyl]-5-methyl-  
 (CA INDEX NAME)

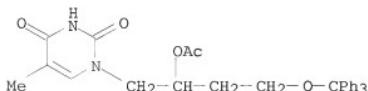


OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L11 ANSWER 120 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1979:611732 CAPLUS  
 DN 91:211732  
 OREF 91:34133a  
 TI The homologation of 1-(2,3-dihydroxypropyl)thymine into  
 1-(2,4-dihydroxybutyl)thymine  
 AU Skaric, V.; Raza, Z.  
 CS Lab. Stereochem. Nat. Prod., "Ruder Boskovic" Inst., Zagreb, 41001,  
 Yugoslavia  
 SO Croatica Chemica Acta (1979), 52(1), 51-9  
 CODEN: CCACAA; ISSN: 0011-1643  
 DT Journal  
 LA English  
 AB The title homologation involved the conversion of  
 1-(3-O-tosyl-2,3-dihydroxypropyl)thymine into the corresponding 3'-ido  
 compound, which on treatment with NaCN in Me<sub>2</sub>SO gave  
 1-(2-hydroxy-3-cyanopropyl)thymine (II). Ethanolysis of I followed by  
 LiAlH<sub>4</sub> reduction of the product gave the title nucleoside analog II (R = H).  
 II (R = H) was tritylated to II (R = Ph<sub>3</sub>C), which was treated with  
 pyridinium 3'-O-acetylthymidine-5'-phosphate in the presence of  
 dicyclohexylcarbodiimide to give 3'-O-acetylthymidyl(5'-2')-1-(4-  
 O-trityl-2,4-dihydroxybutyl)thymine as an N,N-dicyclohexylpseudoourea  
 adduct.  
 IT 71709-65-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and acetylation of)  
 RN 71709-65-4 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-hydroxy-4-(triphenylmethoxy)butyl]-5-  
 methyl- (CA INDEX NAME)



IT 71709-66-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and butylation of)  
 RN 71709-66-5 CAPLUS  
 CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-(acetoxy)-4-(triphenylmethoxy)butyl]-5-  
 methyl- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)



L11 ANSWER 121 OF 121 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1971:541165 CAPLUS  
 DN 75:141165  
 OREF 75:22281a,22284a  
 TI Unconventional nucleotide analogs. VI. Synthesis of purinyl- and pyrimidinylpeptides  
 AU Pandit, U. K.; De Koning, H.  
 CS Org. Chem. Lab., Univ. Amsterdam, Amsterdam, Neth.  
 SO Recueil des Travaux Chimiques des Pays-Bas (1971), 90(9-10), 1069-80  
 CODEN: RTCPA3; ISSN: 0165-0513

DT Journal

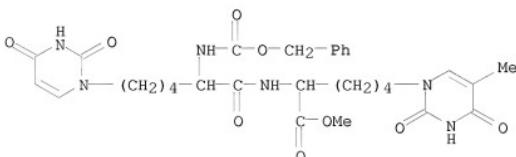
LA English

AB Homogeneous and heterogeneous peptides were synthesized from pyrimidinyl and purinyl amino acids HO<sub>2</sub>CCH(NH<sub>2</sub>)(CH<sub>2</sub>)<sub>4</sub>Q (I) (Q = N<sub>1</sub>-uracyl, N<sub>1</sub>-thyminyl, or N<sub>9</sub>-adeninyl). Investigation of the oligopeptide derived from I (Q = N<sub>1</sub>-uracyl) (Ia) (poly-Ia) showed no secondary structure as a result of base-base interaction; however, the polymer was found to complex weakly with poly(adenylic acid). Poly-Ia also exhibited a stimulation of phenylalanine incorporation in the *in vitro* synthesis of poly(phenylalanine).

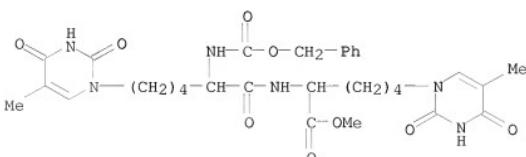
IT 33895-07-7P 33895-08-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 33895-07-7 CAPLUS

CN 1(2H)-Pyrimidinehexanoic acid,  $\alpha$ -[2-(carboxyamino)-6-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)hexanamido]-3,4-dihydro-5-methyl-2,4-dioxo-, N-benzyl methyl ester (8CI) (CA INDEX NAME)

RN 33895-08-8 CAPLUS

CN 1(2H)-Pyrimidinehexanoic acid,  $\alpha$ -[2-(carboxyamino)-6-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)hexanamido]-3,4-dihydro-5-methyl-2,4-dioxo-, N-benzyl methyl ester (8CI) (CA INDEX NAME)



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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
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